# TYBOUTS SITE ADMINISTRATIVE RECORD FILE \* INDEX OF DOCUMENTS

## REMEDIAL INVESTIGATION/FEASIBILITY STUDY INDEX

- 1. <u>Notice of Filing of Administrative Record</u>, 7/10/87. A Certificate of Service and Service List are attached. P. 000001-000011.
- 2. Remedial Investigation/Feasibility Study Index, 7/10/87. P. 000012-000151.

Note: Company of organizational affiliation is identified in the index only when it appears in the record.

<sup>\*</sup> Administrative Record File available 1/4/90.

## PROJECT ADMINISTRATION

- 1. Work Assignment Amendment, 2/26/86. P. 000152-000152.
- 2. Work Assignment Amendment, 8/8/85. P. 000153-000153.
- 3. Report: Work Plan Modification No. 1, Remedial Investigation/Feasibility Study, Tybouts Conner Landfill, New Castle County, Delaware, prepared by Mr. George D. Gardner, NUS Corporation, 1/84. P. 000154-000161.
- 4. Report: Work Plan Modification No. 2, Remedial Investigation/Feasibility Study, Tybouts Conner Landfill, New Castle County, Delaware, prepared by Mr. George D. Gardner, NUS Corporation, 3/84. P. 000161-000169.
- 5. Work Assignment Amendment, 4/20/84. P. 000170-000170.
- 6. Report: Work Plan Modification No. 3, Remedial Investigation/Feasibility Study, Tybouts Conner Landfill, New Castle County, Delaware, prepared by Mr. George D. Gardner, NUS Corporation, 7/84. P. 000171-000184.
- 7. Contract Pricing Proposal, (undated). Exhibits A-E are attached. P. 000185-000191.
- 8. Work Assignment Amendment, 6/29/84. P. 000192-000192.
- 9. Report: Work Plan, Remedial Investigation/
  Feasibility Study of Alternatives, Tybouts Corner
  Landfill, New Castle County, Delaware, prepared by
  Gerard D. Gardner, NUS Corporation, 8/83. P. 000193000323.
- 10. Letter to Mr. Robert A. Burns, NUS Corporation, from Mr. William P. Topping, U.S. EPA, re: Interim Work Plan approvals for the Tybouts Landfill, McAdoo, Drake Chemical, Nyanza, Krysowaty Farm, Bridgeport POS Sites, 5/23/83. P. 000324-00326.
- 11. Letter to Mr. Robert A. Burns, NUS Corporation, from Mr. William M. Kaschak and Mr. William R. Topping, U.S.
- \* Administrative Record File available 1/4/90.

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EPA, re: Work Plan Approval for Tybouts Corner Landfill site under Contract No. 68-01-6699, 6/30/83. P. 000327-000327.

12. Report: Work Plan, Remedial Investigation/
Feasibility Study of Alternatives, Optional Form 60,
Tybouts Corner Landfill, New Castle County, Delaware,
prepared by Mr. George D. Gardner, NUS Corporation,
8/83. P. 000328-000441.

## CORRESPONDENCE 1986/1985

- Letter to Ms. Judith A. Dorsey, U.S. EPA, from Mr. Mr. George J. Weiner, Schneltzer, Aptaker and Sheppard,
   P.C., re: Tybouts Corner/NUS Corporation Comments on Proposed Remedial Plan, 2/25/86. P. 000442-000444.
- 2. Letter to Mr. George J. Weiner, Schmeltzer, Aptaker and Sheppard, P.C., from Mr. James L. Duffield, Duffield Associates, Inc., re: Tybouts Landfill, Cap Concept Evaluation, 2/24/86. P. 000445-000447.
- 3. Letter to Mr. Roy Shrock, U.S. EPA, from Mr. David E. MacIntyre, NUS Corporation, re: Work Assignment Request No. 04, 2/26/86. P. 000448-000448.
- 4. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. Daniel R. Hamel, NUS Corporation, re: Lab chemist information, 1/28.86. P. 000449-000449.
- 5. Letter to Mr. Roy S. Schrock, U.S. EPA, from Mr. David E. MacIntyre, NUS Corporation, re: NUS response to Remedial Action Alternatives proposed by Responsible Parties for Tybouts Corner Landfill, 1/14/86. P. 000450-000456.
- 6. Table: <u>Summary of Computer Modeling of Surface</u>
  <u>Infiltration Proposed Silt/PVC Membrane Surface Cap,</u>
  <u>Tybouts Corner Landfill</u>, undated. P. 000457-000457.
- 7. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. Danile R. Hamel, NUS Corporation, re: List of chemists, 1/6/86. P. 000458-00458.
- 8. Meeting summary, Tybouts Corner Landfill Site, 12/18/85. P. 000459-000461.
- 9. Letter to Mr. James Seif, Regional Administrator, U.S. EPA, from Mr. John E. Wilson, Delaware Department of Natural Resources and Environmental Control, re: Proposed Remedial Alternative for the Tybouts Corner Landfill site, 12/13/85. P. 000462-000462.
- 10. Letter to Mr. James L. Duffield, Duffield Associates, Inc., from Mr. Ed Shoener, U.S. EPA, re: Proposed cap for the Tybouts Landfill Site, 11/6/85. P. 000463-000463.

- 11. Letter to Ms. Judith A. Dorsey, U.S. EPA, from Mr. Phillip G. Petallick, Delaware Department of Natural Resources and Environmental Control, re: Implementation of Remedial Actions at Tybouts Corner, 10/23/85.
  P. 000464-000467. A Remedial Action Flow Chart is attached.
- 12. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. David E. MacIntyre, NUS Corporation, re: Volumes I and V of the Tybouts Corner Landfill Remedial Investigation Feasibility Study Report, 10/22/85. P. 000468-000468.
- 13. Letter to Mr. George Weiner, Schmeltzer, Aptaker and Sheppard, P.C., from Mr. James L. Duffield, Duffield Associates, Inc., re: Tybouts Corner Landfill, Texaco Dredge Spoils, 10/18/85. P. 000469-000481. The following are attached:
  - a) a Table of Texaco Dredge Spoils Textural Characteristics;
  - b) a Table of Texaco Dredge Spoils Laboratory Permiability Test Summary;
  - c) a Location Sketch, Texaco Dredge Spoils;
  - d) a Graph of Moisture-Density Relationship for Texaco Dredge Spoils, Proctor Curve No. 1;
  - e) a Graph of Moisture-Density Relationship for Texaco Dredge Spoils, Proctor Curve No. 2;
  - f) six Laboratory reports.
- 14. Letter to Mr. George Weiner, Schmeltzer, Aptaker and Sheppard, P.C., from Mr. James F. Duffield, Duffield Associates, Inc., re: Tybouts Corner Landfill, Texaco Dredge Spoils, 10/18/85. P. 000482-000492. The following are attached:
  - a) a Table of Texaco Dredge Spoils Textural Characteristics;
  - b) a Table of Texaco Dredge Spoils Laboratory Permiability Test Summary;
  - c) a Location Sketch, Texaco Dredge Spoils;

- d) a Graph of Moisture-Density Relationship for Texaco Dredge Spoils, Proctor Curve No. 1;
- e) a Graph of Moisture-Density Relationship for Texaco Dredge Spoils, Proctor Curve No. 2;
- f) four laboratory reports.
- 15. Memorandum to Mr. David E. MacIntyre, NUS Corporation, from Mr. G. D. Gardner, NUS Corporation, re: September 26, 1985 meeting with U.S. EPA and Delaware Department of Natural Resources and Environmental Control concerning Tybouts Corner Landfill, 10/16/85. P. 000493-000495.
- 16. Letter to Mr. George Weiner, Schmeltzer, Aptaker and Sheppard, P.C., from Mr. James L. Duffield, Duffield Associates, Inc., re: Tybouts Corner Landfill, Texaco Dredge Spoils, 10/18/85. P. 000496-000504. The following are attached:
  - a) a Table of Texaco Dredge Spoils Textural Characteristics;
  - b) a Table of Texaco Dredge Spoils Laboratory Permiability Test Summary;
  - c) a Location Sketch, Texaco Dredge Spoils;
  - d) a Graph of Moisture-Density Relationship for Texaco Dredge Spoils, Proctor Curve No. 1;
  - e) a Graph of Moisture-Density Relationship for Texaco Dredge Spoils, Proctor Curve No. 2;
  - f) two laboratory reports.
- 17. Letter to Ms. Judity Dorsey, U.S. EPA, from Mr. Dennis V. Brenan, Morgan, Lewis & Bockius, re: Tybouts Corner Landfill reports, 9/17/85. P. 000505-000534. The following are attached:
  - a) a West Landfill/Main Landfill Surface Cap
     Report;
  - b) a Remediation Plan Subsurface Drains
     Report;

- c) a Groundwater Remedial Measures Off-site Monitoring Program Report (2 copies).
- 18. Letter to Mr. Dennis Brenan, Morgan, Lewis & Bockius, and Mr. George J. Weiner, Schmeltzer, Aptaker and Sheppard, from Ms. Wendy J. Tisch, Stauffer Chemical Company, re: Revised Groundwater Monitoring Proposal 9/16/85. P. 000535-000544. The proposal is attached.
- 19. Letter to Mr. Dennis V. Brenan, Morgan, Lewis & Bockius, from Mr. John Isbister, Lauber, Malusky and Shelly Engineers, re: Presentation of subsurface drains portion of the Remediation Plan to EPA, 9/16/85.
  P. 000545-000561. The report and an O&M costs table is attached.
- 20. Report: West Landfill/Main Landfill Surface Cap Proposal, (undated). P. 000562-000568.
- 21. Letter to Mr. J. D. Sheehan, Stauffer Chemical Company, from Mr. Gary DiPippo, Wehran Engineering, re:
  Preliminary Investigation-Gas Controls, 9/4/85.
  P. 000569-000573. A table and a site map are attached.
- 22. Memorandum to Mr. D. E. MacIntyre, NUS Corporation, from Mr. G. D. Gardner, NUS Corporation, re: Summary of meeting with Tybouts Corner Landfill PRPs on August 1, 1985, 9/11/85. P. 000574-000577.
- 23. Letter to Mr. George Gardner, NUS Corporation, from Ms. John Isbister, Lauber, Matusky and Shelly Engineers, re: LMS portion of the generator's proposed remediation plan, 9/20/85. P. 000578-000578.
- 24. Memorandum to Messrs. Dave MacIntyre, Don Brenneman, and Don Senovich, NUS Corporation, from Mr. G. D. Gardner, NUS Corporation, re: Meeting notes from meetings held February 8, 1985, 9/10/85. P. 000579-000582.
- 25. Phone/meeting notes between Mr. Charles Baudoian, ERM, and Mr. G. D. Gardner, NUS Corporation, re: Tybouts Corner Remedial Investigation/Feasibility Study, 9/10/85. P. 000583-000583.

- 26. Phone/meeting notes between Ms. Ann Cardinal and Ms. Janet Liffy [sic] and Ms. Joe Donovan, U.S. EPA, re: Information on press availability for September 16, 1985, 9/9/85. P. 000584-000585.
- 27. Memorandum to Mr. Dave MacIntyre, NUS Corporation, from Mr. George Gardner, NUS Corporation, re: July 16, 1985 meeting with the State of Delaware and politicians, 9/5/85. P. 000586-000587.
- 28. Phone/meeting notes between Lawler, Matusky, Shelly Engineers and Mr. G. D. Gardner, NUS Corporation, re: Tybouts Corner Landfill, 9/4/85. P. 000588-000589.
- 29. Phone/meeting notes between Lawler, Matuskey, Shelly Engineers and Mr. G. D. Gardner, NUS Corporation, re: Tybouts Landfill site, 8/27/85. P. 000590-000591.
- 30. Letter to Mr. Glenn Elliot, Dunffield Associates [sic], from Mr. David E. MacIntyre, NUS Corporation, re:
  Monitoring Wells Location Map, 8/19/85. P. 000592-000593.
- 31. Memorandum to Mr. George Gardner, NUS Corporation, from Mr. Tim Hill, NUS Corporation, re: Tybouts Corner soil samples, 8/19/85. P. 000593-000593.
- 32. Letter to Mr. Larry Kahrs, LMS Engineers, from Mr. David E. MacIntyre, NUS Corporation, re: MacDonald and Harbaugh computer modeling, 8/16/85. P. 000594-000594.
- 33. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, from Mr. Tim Hill, NUS Corporation, re: Sepia mylar of the Tybouts Corner Landfill well location map, 8/14/85. P. 000595-000595.
- 34. Memorandum to Mr. D. E. MacIntyre from Mr. G. D. Gardner, re: Summary of meeting with Tybouts Corner Landfill PRPs on August 1, 1985, 8/13/85. P. 000596-000599.
- 35. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, from Mr. G. D. Gardner, NUS Corporation, re: Update on Tybouts Corner Site activity, 8/12/85. P. 000600-000600.
- 36. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Donald Senovich, NUS Corporation, re: Status of Tybouts Corner Landfill Remedial Investigation and Feasibility Study

- of Alternatives, 8/8/85. P. 000601-000616. A work assignment ammendment is attached.
- 37. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. David E. MacIntyre, NUS Corporation, re: Transmittal of Volume V Draft Appendices M, N, and O of the Remedial Investigation/Feasibility Study Report, 8/7/85. P. 000617-000617.
- 38. Phone/meeting notes between Potentially Responsible Parties of Tybouts Corner Landfill and Mr. G. D. Gardner, NUS Corporation, re: June 24, 1985 letter from Schmeltzer, Aptaker and Sheppard, 7/29/85. P. 000618-000620.
- 39. Letter to Ms. E. Ann Cardinal, U.S. EPA, from Mr. Bernard L. Dworsky and Mr. Bruce P. Kraeuter, Water Resources Agency for New Castle County re: Comments on the draft Remedial Investigation/Feasibility Study Report, 7/23/85. P. 000621-000623.
- 40. Memorandum to Mr. Don Senovich and Mr. Dave MacIntyre, NUS Corporation, from Mr. G. D. Gardner, NUS Corporation, re: Summary of May 13, 1985 meeting with U.S. EPA and PRPs, 7/22/85. P. 000624-000626.
- 41. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. David E. MacIntyre, NUS Corporation, re: Draft cost estimates, 7/15/85. P. 000627-000627.
- 42. Letter to Mr. Roy S. Schrock, U.S. EPA, from Mr. David MacIntyre, NUS Corporation, re: Submittal of draft Remedial Investigation/Feasibility Report, 7/2/85. P. 000628-000629.
- 43. Phone/meeting notes between Mr. Doug Robb, New Castle County Sanitary Authority, and Ms. Kim Twinbull, NUS Corporation, re: Availability of sanitary sewer capacities in Tybouts Landfill Site area, 6/27/85. P. 000630-000630.
- 44. Letter to Ms. Judith A. Dorsey, U.S. EPA, and Mr. George Gardner, NUS Corporation, from Mr. George Weiner, Schmeltzer, Aptaker and Sheppard, P.C., Tybouts Corner Remedial Investigation/Feasibility Study,

- 6/24/85. P. 000631-000648. Edited portions of the study are attached.
- 45. Phone/meeting notes between Mr. Glenn Elliott, Duffield Associates, and Mr. Daniel R. Hamel, NUS Corporation, re: Water table conditions in wells in Tybouts Corner Landfill, 6/3/85. P. 000649-000650.
- 46. Phone/meeting notes between Mr. Rob Wickert, State of Delaware, and Mr. G. D. Gardner, NUS Corporation, re: Underground injections, 5/30/85. P. 000651-000651.
- 47. Letter for distribution to counsel from Ms. Judith A. Dorsey, U.S. EPA, re: Draft chapters 10 and 11 of the Remedial Investigation, 5/24/85. P. 000652-000652.
- 48. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. R. W. Ladd, Texaco Refining and Marketing Inc., re: Developing eight inch drilled well, 5/20/85. P. 000653-000655.
- 49. Letter to Mr. Richard Ladd, Texaco Refining and Marketing Co., from Mr. Michael A. Apgar, State of Delaware Department of Natural Resources and Environmental Control, re: Alternative to remedy groundwater contamination, 5/15/85. P. 000656-000657.
- 50. Letter for distribution to counsel from Ms. Judith A. Dorsey, U.S. EPA, re: Draft chapter 6 of the Remedial Investigation, 5/8/85. P. 000658-000658.
- 51. Letter to Mr. Roy Schrock [sic], U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Draft Remedial Investigation Report, 5/7/85. P. 000659-000659.
- 52. Memorandum to Mr. D. Neptune and Mr. J. Bern, NUS Corporation, from Mr. G. D. Gardner, NUS Corporation, re: Comments to the Remedial Investigation Report, 5/7/85. P. 000660-000660.
- 53. Letter for distribution to counsel from Ms. Judith A. Dorsey, U.S. EPA, re: Water level recorder charts, 4/26/85. P. 000661-000661.
- 54. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. G. D. Gardner, NUS Corporation, re: Water level recorder charts, 4/23/85. P. 000662-000662.

- 55. Letter for distribution to counsel from Ms. Judith A. Dorsey, U.S. EPA, re: Volumes II and III of the Draft Remedial Investigation, 4/23/85. P. 000663-000663.
- 56. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G. D. Gardner, NUS Corporation, re: Scheduling meetings, 4/23/85. P. 000664-000664.
- 57. Letter for distribution to counsel from Ms. Judith A Dorsey, U.S. EPA, re: First section of the Remedial Investigation, 4/17/85. P. 000665-000665.
- 58. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Donald Senovich, NUS Corporation, re: Submittal of the Draft Remedial Investigation Report--Sections 1 through 5, 4/16/85. P. 000666-000666.
- 59. Memorandum to Mr. George D. Gardner, NUS Corporation, from Mr. Tom Riley, NUS Corporation, re: Evacuation of waste and RCRA fill, 4/11/85. P. 000667-000669.
- 60. Memorandum to Mr. D. E. MacIntyre and Mr. Dan Hamel, NUS Corporation, from Mr. G. D. Gardner, NUS Corporation, re: March 19, 1985 site visit and meeting, 3/25/85. P. 000670-000671.
- 61. Phone/meeting notes between Mr. Norman Howard, NUS Corporation, and Mr. G. D. Gardner, NUS Corporation, re: Pump test at Tybouts Corner Landfill, 3/22/85. P. 000672-000672.
- 62. Phone/meeting notes between Mr. Gary Zeigler, A.C. Schultes, and Mr. G. D. Gardner, NUS Corporation, re: Pump test on Texaco property, 3/22/85. P. 000673-000673.
- 63. Letter to Ms. Marry McKenzie, Delaware Department of Natural Resources and Environmental Control, from Ms. Tracey O'Keefe, NUS Corporation, re: Potential incineration facility, 3/20/85. P. 000674-000674.
- 64. Letter for distribution to counsel from Ms. Judith A. Dorsey, U.S. EPA, re: Sampling results for the Phase 3 sampling, 3/13/85. P. 000675-000675.
- 65. Letter to Mr. David S. MacIntyre, NUS Corporation, from Mr. Abe Ferdas, U.S. EPA, re: Change in Work Plan "outputs," 3/11/85. P. 000676-000676.

- 66. Letter for distribution to counsel from Ms. Judith A. Dorsey, U.S. EPA, re: Boring logs for the Phase 3 deep wells, 3/7/85. P. 000677-000677.
- 67. Memorandum to Mr. George Gardner, NUS Corporation, from Ms. Tracey O'Keefe, NUS Corporation, re: RCRA cap alternative, 3/6/85. P. 000678-000681. A RCRA Cap Alternative Figure is attached.
- 68. Phone/meeting notes between Mr. Randy McCallister, Delaware Department of Natural Resources and Environmental Control, and Mr. Daniel Hamel, NUS Corporation, re: Groundwater flow direction, 3/5/85. P. 000682-000684.
- 69. Memorandum to Mr. George Gardner, NUS Corporation, from Ms. Tracey O'Keefe, NUS Corporation, re: Rotary kiln incineration, 3/4/85. P. 000685-000687.
- 70. Memorandum to Mr. Abraham Ferdas, U.S. EPA, from Mr. Daniel K. Donnelly, U.S. EPA, re: Final data report for PCB/pesticides, 3/4/85. P. 000685-000687. The data report is attached.
- 71. Memorandum to Mr. Daniel K. Donnelly, U.S. EPA, from S. R. Koryser, U.S. EPA, re: Sampling for pesticides and PCBs, 2/26/85. P. 000688-000688.
- 72. Letter for distribution to counsel from Ms. Judith A. Dorsey, U.S. EPA, re: Sampling results for Phase 3 sampling, 3/4/85. P. 000689-000689.
- 73. Phone/meeting notes re: analysis of quotes, pump test and contractor, 3/1/85. P. 000690-000690.
- 74. Memorandum to Messrs. George Gardner, Pat Falvey, and Andy McClure from Messrs. Ron Lucas and Tom Pepper, re: Survey Report, 2/28/85. P. 000691-000692. A tabulation sheet is attached.
- 75. Phone/meeting notes between Mr. Dave Thomas, Moretrench American, and Mr. Daniel R. Hamel, NUS Corporation, re: Pump test pricing information, 2/28/85. P. 000693-000695.
- 76. Letter to Mr. Dan Hamel, NUS Corporation, from Mr. David Thomas, Moretrench American Corporation, re: Texaco oil refinery pump test, 2/28/85. P. 000696-000696.

- 77. Letter to Mr. Dan Hamel, NUS Corporation, from Mr. Jack W. O'Donnell, A.C. Schultz and Sons, Inc., re: Test well pumping, 2/27/85. P. 000697-000697.
- 78. Letter to Mr. Daniel R. Hamel, NUS Corporation, from Mr. Thomas C. Viviano, Hydro Group, re: Pump test, 2/27/85. P. 000698-000698.
- 79. Phone/meeting notes between Mr. Jack O'Donnell, A.C. Schultis, and Mr. Daniel R. Hamel, NUS Corporation, re: Pump test pricing, 2/26/85. P. 000699-000699.
- 80. Phone/meeting notes between Mr. Jack O'Donnell, A.C. Schultis, and Mr. Daniel R. Hamel, NUS Corporation, re: Pump test, 2/26/85. P. 000700-000700.
- 81. Phone/meeting notes between Mr. Thomas Viviano, Hydro Group, and Mr. D. Hamel, NUS Corporation, re: Pump test, 2/26/85. P. 000701-000701.
- 82. Phone/meeting notes between Mr. Mike Pratt, H. P. Drilling, and Mr. D. Hamel, NUS Corporation, re: Pump test, 2/26/85. P. 000702-000702.
- 83. Phone/meeting notes between Mr. B. Clark, Moretrench American, and Mr. D. Hamel, NUS Corporation, re: Pump test, 2/26/85. P. 000703-000703.
- 84. Phone/meeting notes between Mr. Bill Singleton, Moretrench American, and Mr. D. Hamel, NUS Corporation, re: Pump test, 2/26/85. P. 000704-000704.
- 85. Phone/meeting notes between H.P. Drilling and Mr. D. Hamel, NUS Corporation, re: Pump test, 2/26/85. P. 000705-000705.
- 86. Phone/meeting notes between Mr. Jack O'Donnell, Schultis Brothers Drilling Co., and Mr. D. Hamel, NUS Corporation, re: Pump test, 2/26/85. P. 000706-000706.
- 87. Phone/meeting notes between Mr. Tom Viviano, Hydro Group, and Mr. Daniel R. Hamel, NUS Corporation, re: Pump test, 2/26/85. P. 000707-000707.
- 88. Phone/meeting notes between Mr. Norman Howard, NUS Corporation, and Mr. Daniel R. Hamel, NUS Corporation, re: Pump test subcontractors, 2/26/85. P. 000708-000708.

- 89. Phone/meeting notes between Mr. Tom Viviano, Hydro Group, and Mr. Daniel R. Hamel, NUS Corporation, re: Pump test, 2/26/85. P. 000709-000709.
- 90. Statement of Work, Tybouts Corner Landfill Pump Test, (undated). P. 000710-000711.
- 91. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. David E. MacIntyre, NUS Corporation, re: Inconsistencies in national contract laboratory data, 2/25/85. P. 000712-000713.
- 92. Letter for distribution to counsel from Ms. Judith A. Dorsey, U.S. EPA, re: Site-specific sampling protocol, 2/19/85. P. 000714-000714.
- 93. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Donald Senovich, NUS Corporation, re: Colonial School District meeting room rental bill, 2/14/85. P. 000715-000715.
- 94. Memorandum to Ms. Sandy Strausberg and Mr. Don Brenneman, NUS Corporation, from Mr. George Gardner, NUS Corporation, re: Outline of section 6 of the Remedial Investigation Report, 2/7/85. P. 000716-000722.
- 95. Letter for distribution to counsel from Ms. Judith A. Dorsey, U.S. EPA, re: Sampling results and other enclosures, 1/24/85. P. 000723-000723.
- 96. Phone/meeting notes between Mr. Dan Donnelly, U.S. EPA, and Ms. Katherine Gardner, NUS Corporation, re: Tybouts sampling trip, 1/9/85. P. 000724-000725.
- 97. Memorandum to distribution from Mr. G. D. Gardner, NUS Corporation, re: Pumping well criteria, 1/9/85. P. 000726-000728.
- 98. Memorandum to distribution from Mr. G. D. Gardner, NUS Corporation, re: Potential receptors for contaminants, 1/9/85. P. 000729-000734.

## IV. CORRESPONDENCE 1984

- 1. Memorandum to distribution from Mr. George D. Gardner, NUS Corporation, re: Preliminary Identification of Remedial Alternatives, 12/31/84. P. 000735-000740.
- 2. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G. D. Gardner, NUS Corporation, re: Discussion with responsible parties concerning their own remedial alternatives, 12/19/84. P. 000741-000741.
- 3. Letter to Mr. Denis V. Brenan, Morgan, Lewis & Bockius, from Ms. Judith A. Dorsey, U.S. EPA, re: Confirmation of U.S. EPA, December 18, 1984 meeting, 12/6/84. P. 000742-000742.
- 4. Letter to Mr. James F. Burnett, Potter, Anderson & Corroon, from Ms. Judith A. Dorsey, U.S. EPA, re: Confirmation of U.S. EPA, 12/6/84. P. 000743-000743.
- 5. Letter to Mr. James Burger, Stauffer Chemical Company, from Ms. Judith A. Dorsey, U.S. EPA, re: Confirmation of U.S. EPA, 12/6/84. P. 000744-000744.
- 6. Letter to Mr. George Weiner, Schmeltzer, Aptaker & Sheppard, from Ms. Judith A. Dorsey, U.S. EPA, re: Confirmation of U.S. EPA, 12/6/84. P. 000745-000745.
- 7. Letter to Mr. Robert R. Thompson from Ms. Judith A. Dorsey, U.S. EPA, re: Confirmation of U.S. EPA, 12/6/84. P. 000746-000746.
- 8. Letter to Mr. Jeffrey Smith, Clark, Ladner, Fortenbaugh & Young, from Ms. Judith A. Dorsey, U.S. EPA, re: Confirmation of U.S. EPA, 12/6/84. P. 000747-000747.
- 9. Letter to the Honorable John G. Wilson III, Delaware Department of Natural Resources and Environmental Control, from Mr. Kermit H. Justice, Delaware Department of Transportation, re: Relocation of Delaware Route 7/U.S. Route 13 to Interstate 95, 12/5/84. P. 000748-000748.
- 10. Letter to Mr. George Gardner, NUS Corporation, from Ms. Judith A. Dorsey, U.S. EPA, re: Transmittal of discovery requests, 11/27/84. P. 000749-000749.
- 11. Letter to Distribution from Ms. Judith A. Dorsey, U.S. EPA, re: Field activity for the Site Remedial

- Investigation/Feasibility Study, 11/28/84. P. 000750-000751.
- 12. Letter to Mr. Craig Robertson, R. E. Wright Associates, from Ms. Judith Dorsey, U.S. EPA, re: Phase III drilling, 11/19/84. P. 000752-000752.
- 13. Letter to Ms. Judith Dorsey, U.S. EPA, from Mr. Denis V. Brenan, Morgan, Lewis & Bockius, re: Phase III comments, 11/15/84. P. 000753-000756. The comments are attached.
- 14. Letter to the Honorable John E. Wilson III, Delaware Department of Natural Resources and Environmental Control, from Mr. Kermit H. Justice, Delaware Department of Transportation, re: Relocation of Delaware Route 7/U.S. Route 13 to Interstate 95, 11/1/84. P. 000757-000760. An aerial map of the relocation area and a Tabulation of Property Owners table are attached.
- 15. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G. D. Gardner, NUS Corporation, re: Site inspection and Final Feasibility Study, 10/30/84. P. 000761-000761.
- 16. Letter to Mr. David Swayze, Prickett, Jones, Elliott, Kristol & Schnee, Mr. Jeffrey Smith, Clark, Ladner, Fortenbaugh & Young, Mr. Edward Wolper, Hercules, Inc., Mr. Denis [sic] V. Brenan, Morgan, Lewis & Bockius, Mr. James F. Burnett, Potter, Anderson & Corroon, and Mr. James Burger, Stauffer Chemical Company, from Ms. Judith A. Dorsey, U.S. EPA, re: Aquifiers at the site monitoring wells, 10/26/84. P. 000762-000762.
- 17. Phone/meeting notes between Mr. Roy Shrock [sic], U.S. EPA, and Mr. L. Paul, NUS Corporation, re: Tybouts Alternative Water Supply, 10/25/84. P. 000763-000764.
- 18. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Transmittal of the hydraulic conductivity (permeability) test data for the site monitoring wells, 10/17/84. P. 000765-000766. The data is attached.
- 19. Phone/meeting notes between Mr. Roy Schrock from Mr. G.
  D. Gardner, U.S. EPA, re: Phase III drilling, 10/17/84.
  P. 000767-000767.

- 20. Phone/meeting notes to Mr. Dan Hamel, NUS Corporation, from Mr. George Gardner, NUS Corporation, re: Signs for Tybouts Landfill, 10/4/84. P. 000768-000768.
- 21. Letter to Ms. Judith Dorsey, U.S. EPA, from Mr. Denis [sic] V. Brenan, Morgan, Lewis & Bockius, re: Document and information requests, 10/2/84. P. 000669-000670.
- 22. Letter to Mr. Denis [sic] Brenan, Morgan, Lewis & Bockius, from Ms. Judith A. Dorsey, U.S. EPA, re: Focus Feasibility Study Comments, 9/28/84. P. 000771-000771.
- 23. Letter to Ms. Judith Dorsey, U.S. EPA, from Mr. George J. Weiner, Schmeltzer, Aptaker & Sheppard, P.C., re: Public Water Supply, 9/28/84. P. 000772-000775. A legal agreement is attached.
- 24. Letter to Ms. Judith Dorsey, U.S. EPA, from Mr. Denis [sic] V. Brenan, Morgan, Lewis & Bockius, re: Focus Feasibility Study Comments, 9/20/84. P. 000776-000776.
- 25. Memorandum to Mr. George Gardner, NUS Corporation, from Mr. George Gartseff, NUS Corporation, re: Phase III Drilling Health and Safety Requirements, 9/13/84. P. 000777-000777.
- 26. Report: <u>Negotiating Decision Document, Initial Remedial</u>
  <u>Measures</u>, prepared by Mr. Thomas P. Gichler, 9/13/84.
  P. 000778-000793. A report is attached.
- 27. Letter to Mr. Jeffrey Smith, Clark, Ladner, Fortenbaugh and Young, from Ms. Judith A. Dorsey, U.S. EPA, re: Transmittal of the Remedial Investigation/Feasibility Study Work Plan, Modifications 1 and 3 for the Work Plan, monitoring data, and other materials distributed to defendants, 9/24/84. P. 000794-000794.
- 28. Letter to Mr. Edward Wolper, Hercules, Inc., from Ms. Judith A. Dorsey, U.S. EPA, re: Transmittal of the Remedial Investigation/Feasibility Study Work Plan, Modifications 1 and 3 for the Work Plan, monitoring data, and other materials distributed to defendants, 9/24/84. P. 000795-000795.
- 29. Letter to Mr. Denis [sic] Brenan, Morgan, Lewis & Bockius, Mr. James Burger, Stauffer Chemical Company, Mr. James Barnett, Potter, Anderson & Corroon, and David Swayze, Prickett, Jones, Elliott, Kristol & Schnee, from Ms. Judith A. Dorsey, U.S. EPA, re:

- Transmittal of residential well data and three Remedial Investigation/Feasibility Study Status Reports, 9/24/84. P. 000796-000796.
- 30. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G.D. Gardner, NUS Corporation, re: PRP inquiry, 9/12/84. P. 000797-000797.
- 31. Letter to Mr. James F. Duffield, Duffield Associates, Inc., from Ms. Judith A. Dorsey, U.S. EPA, re: Transmittal of boring map for modified Work Plan, 9/7/84. P. 000798-000798.
- 32. Meeting notes for September 6, 1984 Delaware Geological Survey meeting, 9/6/84. P. 000799-000800.
- 33. Meeting notes for September 6, 1984 Delaware Geological Survey meeting, 9/6/84. P. 000801-000801.
- 34. Letter to Mr. Ron Byrd, NUS Corporation, from Mr. Daniel K. Donnelly, U.S. EPA, re: Transmittal of microbiological analytical report and field sheets, 6/12/84. P. 000802-000802.
- 35. Memorandum to Mr. Daniel K. Donnelly from Ms. Bettina B. Fletcher, U.S. EPA, re: Microbiological Analyses on Drinking Water Supplies, and Monitoring Wells Surrounding Tybouts Landfill, 6/11/84. P. 000803-000805. Two Sample Description tables are attached.
- 36. Chain of Custody Record for Project No. 0716.11, 5/1/84. P. 000806-000811.
- 37. Summary of the June 11, 1984 Tybouts Corner Landfill Remedial Investigation/Feasibility Study Meetings, 6/11/84. P. 000812-000815.
- 38. Memorandum to Mr. Robert Pickert from Mr. Roy W. Miller re: Remedial Investigation Work Plan, 6/13/84. P. 000816-000816.
- 39. Memorandum to Mr. Bob Pickert from Mr. Gregory M. Mitchell re: Comments on EPA Remedial Investigation/Feasibility Study, 6/8/84. P. 000817-000817.
- 40. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. G. D. Gardner, NUS Corporation, re: Response to critique of NUS Work Plan, 6/8/84. P. 000818-000822.

- 41. Phone/meeting notes between Ms. Marilyn Plitnik, Delaware Department of Natural Resources and Environmental Control and Mr. G. D. Gardner, NUS Corporation, re: Drilling procurement, 6/6/84. P. 000823-000823.
- 42. Phone/meeting notes between Mr. Charlie Bandoian and Mr. G. D. Gardner, NUS Corporation, re: State Specifications, 6/6/84. P. 000824-000824.
- 43. Phone/meeting notes between Mr. Roy Schrock and Mr. G. D. Gardner, NUS Corporation, re: State specifications, 6/6/84. P. 000825-000825.
- 44. Phone/meeting notes to Mr. Daniel R. Hamel, NUS Corporation, from Ms. Judy Denver re: Continuous Water Level Recorders, 6/5/84. P. 000826-000826.
- 45. Phone/meeting notes to Mr. Daniel R. Hamel, NUS Corporation, from Ms. Judy Denver re: Continuous Water Land Recorders, 6/4/84. P. 000827-000827.
- 46. Letter to Ms. Beverly V. Baxter from Mr. Roy R. Schrock, U.S. EPA, re: Transmittal of the March and April Technical Progress Reports and public newsletter, 6/4/84. P. 000828-000828.
- 47. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G. D. Gardner, NUS Corporation, re: Focused Feasibility Study, 6/4/84. P. 000829-000829.
- 48. Letter to Mr. Charles T. Gaynor II, Empire Soils Investigations, from Mr. John L. Renehan, NUS Corporation, re: Transmittal of the signed Work Assignment Modification, 6/4/84. P. 000830-000831. The Work Assignment Modification is attached.
- 49. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Transmittal of a preliminary draft of Work Plan Modification No. 3, 5/31/84. P. 000832-000832.
- 50. Phone/meeting notes to Mr. Daniel R. Hamel from Ms. Judy Denver re: Tybouts Water Level Recorders, 5/31/84. P. 000833-000833.
- 51. Phone/meeting notes to Mr. Jim DeMartinis, Roux and Associates, from Mr. Daniel R. Hamel re: Information

- distributed to Responsible Parties in a May 30, 1984 meeting, 5/31/84. P. 000834-000834.
- 52. Memorandum to Mr. Robert C. Pickert from Mr. Mark C. Blosser, Delaware Department of Natural Resources & Environmental Control, re: NUS Study/Work Plan Modification No. 2, 5/30/84. P. 000835-000836.
- 53. Meeting notes from Tybouts Corner Landfill Remedial Investigation/Feasibility Study meeting, 5/30/84. P. 000837-000840.
- 54. Meeting notes from Tybouts Corner Landfill Remedial Investigation/Feasibility Study meeting, 5/30/84. P. 000841-000842.
- 55. Phone/meeting notes between Mr. Mike Apgar and Mr. G. D. Gardner, NUS Corporation, re: Work Plan Modification No. 3, 5/25/84. P. 000843-000843.
- 56. Phone/meeting notes between Mr. Bob Prickert and Mr. G. D. Gardner, NUS Corporation, re: Tybout sampling, 5/25/84. P. 000844-000844.
- 57. Letter to Mr. James DeMartinis, Roux Associates, from Mr. George D. Gardner, NUS Corporation, re: Water Level Work Sheets, 5/24/84. P. 000845-000845.
- 58. Letter to Mr. Bert L. Thomsen, Empire Soils Investigation, Inc., from Mr. John L. Renehan, NUS Corporation, re: Transmittal of the Work Assignment Modification, 5/24/84. P. 000846-000846.
- 59. Phone/meeting notes between Mr. Ron Kovacs, U.S. EPA, and DRB [sic], NUS Corporation, re: State purchase of drilling services, 5/22/84. P. 000847-000847.
- 60. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G. D. Gardner, NUS Corporation, re: Draft of Work Plan Modification No. 3, 5/22/84. P. 000848-000848.
- 61. Phone/meeting notes between Ms. Judy Dorsey, U.S. EPA, and Mr. G. D. Gardner, NUS Corporation, re: Meeting with responsible parties, 5/22/84. P. 000849-000849.
- 62. Phone/meeting notes between Ms. Marilyn Plitnik,
  Delaware Department of Natural Resources &
  Environmental Control, and Mr. G. D. Gardner, NUS

- Corporation, re: Advertising of bids for Tybouts drilling, 5/22/84. P. 000850-000850.
- 63. Phone/meeting notes between Ms. Judy Dorsey, U.S. EPA, from Mr. G. D. Gardner, NUS Corporation, re: Staff meeting, 5/17/84. P. 000851-000851.
- 64. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Transmittal of trip and meeting notes, 5/16/84. P. 000852-000856. Three phone/meeting notes are attached.
- 65. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Transmittal of April 26, 1984 meeting notes, 5/10/84. P. 000857-000862.
- 66. Memorandum to Mr. George Gardner from Ms. Joanne Cosgrove, NUS Corporation, re: Tybouts samples disposal, 5/10/84. P. 000863-000863.
- 67. Trip and Meeting Report for the Remedial Investigation/Feasibility Study, 5/9/84. P. 000864-000867.
- 68. Letter to Mr. Denis [sic] Brenan, Morgan, Lewis & Bockius, Mr. James Burnett, Potter, Anderson & Corroon, Mr. David Swayze, Prickett, Jones, Elliott, Kristol & Schnee, and Ms. Wendy Tisch, Stauffer Chemical Company, from Ms. Judith A. Dorsey, U.S. EPA, re: EPA presentation of recent sampling results, 5/8/84. P. 000868-000868.
- 69. Phone/meeting notes between Ms. Marilyn Plitnik and Mr. G. D. Gardner, NUS Corporation, re: Arrangement of site reconnaissances to scope new drilling locations, 5/7/84. P. 000869-000869.
- 70. Phone/meeting notes between Mr. Dom DiGuilio, U.S. EPA, and Mr. G. D. Gardner, NUS Corporation, re: Well contamination, 5/7/84. P. 000870-000870.
- 71. Phone/meeting notes between Mr. Charles Bandonian and Mr. G. D. Gardner, NUS Corporation, re: Scoping of new drilling locations, 5/7/84. P. 000871-000871.
- 72. Phone/meeting notes between Ms. M. Plitnik and Mr. G. D. Gardner, NUS Corporaiton, re: Meeting to discuss the new boring program, 5/7/84. P. 000872-000872.

- 73. Letter to Ms. Marilyn A. Plitnik, Delaware Department of Natural Resources & Environmental Control, from Mr. Charles A. Bandoian, Environmental Resources Management, Inc., re: Critique of NUS Plan Modification No. 2, 5/7/84. P. 000873-000875.
- 74. Phone/meeting notes to Mr. Daniel R. Hamel from Mr. Jim DeMartinis, Roux and Associates, re: Split sampling at Tybouts, 5/5/84. P. 000876-000876.
- 75. Phone/meeting notes between Mr. Dan Donelly, U.S. EPA, Ms. Tina Fletcher, U.S. EPA, and Mr. George Gardner, NUS Corporation, re: Preliminary results of site wells, 5/4/84. P. 000877-000877.
- 76. Phone/meeting notes between Mr. R. McCracken, NUS Corporation, and Mr. G. Gardner, NUS Corporation, 5/4/84. P. 000878-000878.
- 77. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G. D. Gardner, NUS Corporation, re: New site information, 5/4/84. P. 000879-000879.
- 78. Phone/meeting notes between Mr. Don DiGuillo and Mr. George Gardner, NUS Corporation, re: Residential wells, 5/4/84. P. 000880-000880.
- 79. Phone/meeting notes between Mr. Daniel R. Hamel and Mr. Richard Ladd, Getty Oil Company, re: Location of Getty Oil Company's production and monitoring wells, 5/4/89. P. 000881-000882.
- 80. Phone/meeting notes between Mr. Daniel R. Hamel and Ms. Mary Ann Hardesty re: 1968 Aerial Photographs, 5/3/84. P. 000883-000883.
- 81. Phone/meeting notes to Mr. Jim DeMartinas, Roux and Associates, from Mr. Daniel R. Hamel re: Tybouts monitoring well sampling, 5/3/84. P. 000884-000884.
- 82. Phone/meeting notes between Mr. Daniel R. Hamel and Mr. Jim DeMartinis, Roux and Associates, re: Observation of sampling, 5/2/84. P. 000885-000885.
- 83. Report: <u>Tybouts Corner Landfill, Progress and Plans,</u>
  <u>April 1984 Update</u>, (undated). P. 000886-000887.
- 84. Meeting notes from the April 26, 1984 All-Party-Review, 5/1/84. P. 000888-000892.

- 85. Phone/meeting notes between Ms. Tina Fletcher, U.S. EPA, and Mr. Bruce E. Scott, NUS Corporation, re: Sampling of a 4" monitoring well, 4/27/84. P. 000893-000893.
- 86. Phone/meeting notes between Ms. Leslie Braun and Mr. Bruce Scott, NUS Corporaiton, re: Lab samples, 4/27/84. P. 000894-000894.
- 87. Phone/meeting notes between Mr. George Gardner, NUS Corporation, and Mr. Bruce Scott, NUS Corporation, re: Well-purging reduction, 4/25/84. P. 000895-000895.
- 88. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Remedial Investigation status, 4/23/84. P. 000896-000906. A Summary of Level of Effort in Manhours table and a Summary of Subcontracting and Equipment Status table are attached.
- 89. Letter to Mr. D. Donnelly, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Transmittal of chemical data from January/February 1984 sampling, 4/20/84. P. 000907-000907.
- 90. Phone/meeting notes between Mr. Jack Renehan and Mr. G. D. Gardner, NUS Corporaiton, re: Project budget, 4/17/84. P. 000908-000908.
- 91. Phone/meeting notes between Mr. Daniel R. Hamel and Mr. Roy Schrock, U.S. EPA, re: Septic system contamination parameters, 4/17/84. P. 000909-000909.
- 92. Letter to Mr. Charles Bandoian, Environmental Resources Management, Inc., from Mr. George D. Gardner, NUS Corporation, re: Transmittal of the Remedial Investigation hydrologic maps, 4/17/84. P. 000910-000910.
- 93. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Transmittal of screening, inorganic and organic analysis, 4/16/84. P. 000911-000911.
- 94. Memorandum to Mr. Dave Soltis, NUS Corporation, from Mr. George D. Gardner, NUS Corporation, re: Approval of subcontract invoices for Empire Soils Investigation Services, 4/11/84. P. 000912-000912.

- 95. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, from Mr. Daniel R. Hamel re: Septic systems contamination parameters, 4/11/84. P. 000913-000913.
- 96. Phone/meeting notes between Mr. Charles Bandoian, Delaware Department of Natural Resources and Environmental Control, and Mr. G. D. Gardner, NUS Corporation, 4/5/84. P. 000914-000914.
- 97. Phone/meeting notes between Mr. Dick Nugent, NUS Corporation, and Mr. John George, NUS Corporation, re: Environmental Assessment, 4/5/84. P. 000915-000915.
- 98. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, from Mr. G. D. Gardner, NUS Corporation, re: Sampling for week of April 23, 1984, 4/4/84. P. 000916-000916.
- 99. Letter to Mr. Charles T. Gaynor III, Empire Soils Investigations, Inc., from Mr. John L. Renehan, NUS Corporation, re: Transmittal of Signed Work Assignment No. 1, 3/29/84. P. 000917-000917.
- 100. Phone/meeting notes to Mr. Charles Gayner, Empire Soils Investigations, Inc., from Mr. Daniel R. Hamel re: Physical property testing of soil sample, 3/28/84. P. 000918-000918.
- 101. Phone/meeting notes between Mr. Charlie Gaynor, Empire Soils Testing, and Mr. G. D. Gardner, NUS Corporation, re: Alternate method of permeability testing, 3/27/84. P. 000919-000919.
- 102. Phone/meeting notes to Mr. Charles Gaynor, Empire Soil Investigations, Inc., from Mr. Daniel R. Hamel re: Physical property testing, 3/27/84. P. 000920-000920.
- 103. Letter to Mr. Ken Fitzsimmons, Kucera & Associates, Inc. from Mr. Daniel R. Hamel, NUS Corporation, re: Transmittal of corrected reference drawing, 3/27/84. P. 000921-000921.
- 104. Memorandum to distribution from Mr. George D. Gardner, NUS Corporation, re: Meeting report, 3/23/84. P. 000922-000923.
- 105. Phone/meeting notes between Mr. Ray Miller and Mr. John George, NUS Corporation, re: Aquatic studies, 3/20/84. P. 000924-000924.

- 106. Phone/meeting notes between Mr. Jack Stone, NUS Corporation, and Mr. John George, NUS Corporation, re: Environmental Assessment, 3/19/84. P. 000925-000926.
- 107. Phone/meeting notes between Mr. Charles Baustoran and Mr. G. D. Gardner, NUS Corporation, re: March 22, 1984 meeting, 3/15/84. P. 000927-000927.
- 108. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G. D. Gardner, NUS Corporation, re: Screening and evaluation data, 3/14/84. P. 000928-000928.
- 109. Phone/meeting notes between Mr. Bill Eckel and Mr. Dick McCracken, NUS Corporation, re: Problems with 3 samples, 3/6/84. P. 000929-000929.
- 110. Phone/meeting notes to Mr. Daniel R. Hamel from Mr. Roy Schrock, U.S. EPA, re: Chemical results of sampling at the site, 3/5/84. P. 000930-000931.
- 111. Phone/meeting notes between Mr. Charles Bandorean and Mr. G. D. Gardner, NUS Corporation, re: Site survey, 2/24/84. P. 000932-000932.
- 112. Phone/meeting notes between Mr. Bart Marcy, NUS Corporation, and Mr. John Geaye, NUS Corporation, re: Environmental Assessment, 2/23/84. P. 000933-000933.
- 113. Memorandum to Ms. Joanne Cosgrove, NUS Corporation, from Mr. George D. Gardner, NUS Corporation, re: Sample analysis and chain-of-custody forms, 2/21/84. P. 000934-000934.
- 114. Letter to the Honorable Jeffrey G. Mack, Delaware House of Representatives, from Mr. Thomas P. Eichler, U.S. EPA, re: Alternative drinking water supply, 2/17/84. P. 000935-000936.
- 115. Memorandum to Mr. Mark Ulintz from Ms. Joanne Cosgrove, NUS Corporation, re: Transmittal of packing lists of samples, 2/17/84. P. 000937-000939. Two lists are attached.
- 116. Phone/meeting notes between Mr. Bart Marcy, NUS Corporation, and Mr. John George, NUS Corporation, re: Public Health Impact, 2/14/84. P. 000940-000941.
- 117. Phone/meeting notes between Mr. Dave Soltis, NUS Corporation, and Mr. G. D. Gardner, NUS Corporation,

- re: Screening analysis of site samples, 2/13/84. P. 000942-000942.
- 118. Memorandum to Mr. Bart Marcy, NUS Corporation, from Mr. John George, NUS Corporation, re: Environmental Assessment, 2/8/84. P. 000943-000948. The Assessment is attached.
- 119. Memorandum to S.F. Pedersen, NUS Corporation, from Mr. G.D. Gardner, NUS Corporation, re: January 30 and 31, 1984 Site Visit, 2/6/84. P. 000949-000950.
- 120. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, from Mr. G.D. Garddner, NUS Corporation, re: Site drilling conditions, 2/6/84. P. 000951-000951.
- 121. Phone/meeting notes between Mr. Dan Hamel, NUS Corporation, and Mr. G.D. Gardner, NUS Corporation, re: Site sampling, 2/6/84. P. 000952-000952.
- 122. Phone/meeting notes between McDougall [sic] and Frank Schaefer re: Data acquisition and steam and tide data, 2/3/84. P. 000953-000953.
- 123. Phone/meeting notes between McDougall [sic], and Mr. Bangalore Lakshman, Artesian Water Company, re: Well location maps, 2/3/84. P. 000954-000954.
- 124. Phone/meeting ntoes to Mr. Daniel R. Hamel from Mr. Jed Callen, U.S. EPA, re: Sampling by Roux and Associates, 2/3/84. P. 000955-000966.
- 125. Phone/meeting notes between Mr. George Gardner, NUS Corporation, and Mr. Dan Hamel, NUS Corporation, re: Borehole Drilling, 2/2/84. P. 000956-000956.
- 126. Phone/meeting notes between Mr. Charles Bandoran and Mr. G.D. Gardner, NUS Corporation, re: Change in the monitoring well construction, 2/1/84. P. 000957-000957.
- 127. Memorandum to File from Mr. John George, NUS Corporation, re: January 19-20, 1984, site reconnaissance, 2/1/84. P. 000958-000959.
- 128. Letter to Mr. George D. Gardner, NUS Corporation, from Ms. Marilyn A. Plitnik, Delaware Department of Natural Resources and Environmental Control, re: Transmittal of

- the well and electric log for Getty Well, 1/30/84. P. 000960-000960.
- 129. Phone/meeting notes between Mr. Bill Eckel and Mr. Dick McCracken, NUS Corporation, re: Mix-up of Cosler shipments, 1/27/84. P. 000961-000961.
- 130. Meeting notes between Mr. Dan Hamel and Mr. George Gardner, NUS Corporation, re: Inconsistancies in data, 1/27/84. P. 000962-000962.
- 131. Phone/meeting notes between Ms. Joanne Cosgrove, NUS Corporation, and Mr. G.D. Gardner, NUS Corporation, re: Samples shipment, 1/27/84. P. 000963-000963.
- 132. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Remedial Enforcement/ Feasibility Study, 1/27/84. P. 000964-000964.
- 133. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G.D. Gardner, NUS Corporaiton, re: Meetings with Rax Associates, 1/25/84. P. 000965-000965.
- 134 Phone/meeting notes between Mr. Mark Ulintz, NUS Corporation, and Mr. George Gardner, NUS Corporation, re: Broken pumps, 1/25/84. P. 000966-000966.
- 135. Memorandum to Mr. S.F. Pedersen from Mr. G.D. Gardner, NUS Corporation, re: January 20, 1984, site meeting with Environmental Resources Management, Inc., 1/25/84. P. 000967-000970.
- 136. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Comments on the Work Plan Modification No. 1, 1/23/84. P. 000971-000972.
- 137. Memorandum to Mr. David Soltis, NUS Corporation, from Mr. George D. Gardner, NUS Corporation, re: Chemical analysis of groundwater samples, 1/23/84. P. 000973-000973.
- 138. Phone/meeting notes between Mr. Garth Glen and Mr. George D. Gardner, NUS Corporation, re: Split samples, 1/18/84. P. 000974-000974.
- 139. Phone/meeting notes between Mr. Abe Fertas, Mr. John Cooper, Mr. G.D. Gardner, and Mr. S. Pedersen, NUS

- Corporation, re: Split sampling, 1/18/84. P. 000975-000975.
- 140. Phone/meeting notes between Mr. George Gardner and Mr. Dan Hamel, NUS Corporation, re: Split sampling, 1/18/84. P. 000976-000976.
- 141. Phone/meeting notes between Mr. Paul Roux, Roux Associates, and Mr. G.D. Gardner, NUS Corporation, re: Split samples, 1/18/84. P. 000977-000977.
- 142. Phone/meeting notes between Mr. Bob Byron, TIGG Corporation, and Mr. Jack Frost, NUS Corporation, re: State requirements, 1/12/84. P. 000978-000978.
- 143. Phone/meeting notes between Shawn [sic] and Mr. Jack Frost, NUS Corporation, re: PVC Pipe Order, 1/12/84. P. 000979-000979.
- 144. Phone/meeting notes between Shawn [sic] and Mr. Jack Frost, NUS Corporation, re: PVC Pipe Order, 1/10/84. P. 000980-000980.
- 145. Phone/meeting notes between Mr. Dan Hamel, NUS Corporation, and Mr. Jack Frost, NUS Corporation, re: Sampling trip, 1/10/84. P. 000981-000981.
- 146. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. G.D. Gardner, NUS Corporation, re: Status of access to Wagner & Lester property, 1/3/84. P. 000982-000982.
- 147. Letter to Mr. George D. Gardner, NUS Corporation, from Mr. Roy Schrock, U.S. EPA, re: Approval of Work Plan Modification No. 1, 1/3/84. P. 000983-000983.
- 148. Phone/meeting notes between Mr. Charlie Bandoran and Mr. Jack Frost, NUS Corporation, re: Tybouts Wells, 1/3/84. P. 000984-000984.

## V. <u>CORRESPONDENCE 1983</u>

- 1. Report: Tybouts Corner Landfill Progress and Plans,
  December 1983 Update. (undated) P. 000985-000985.
- 2. Phone/meeting notes between Ms. Maralynn Hewitt and Mr. Jack Frost, NUS Corporation, re: Glued Couplings on PVC rises pipe, 12/29/83. P. 000986-000986.
- 3. Phone/meeting notes between Mr. Bill Bonneau and Mr. G.D. Gardner, NUS Corporation re: Level of involvement of LOE in the Remedial Investigation/ Feasibility Study, 12/28/83. P. 000987-000987.
- 4. Phone/meeting notes between Ms. Marilyn Hewitt and Mr. Jack Frost of NUS Corporation re: Decontamination of a pumping system, 12/21/83. P. 000988-000989.
- 5. Phone/meeting notes between Mr. Pete Stothoff, William Stothoff Company and Mr. Jack Frost, NUS Corporation re: Pump specifications, 12/21/83. P. 000990-000991.
- 6. Memorandum to Mr. G. Gardner from Mr. G. Gartseff re: Tybouts Air Monitoring continuation, 12/19/83. P. 000992-000992.
- 7. Phone/meeting notes between Ms. Susan Eisenberg, NUS Corporation and Mr. George Gardner, NUS Corporation re: Empire's invoice of December 14, 1983, 12/19/83. P. 000993-000993.
- 8. Phone/meeting notes between Mr. Roy Schock of U.S. EPA, and Mr. G.D. Gardner, NUS Corporation, re: Site access onto Wagner and Lester property, 12/16/83. P. 000994-000995.
- 9. Phone/meeting ntoes between G.D.G. [sic] and unknown party re: Handling of invoices, 12/16/83. P. 000996-000996.
- 10. Phone/meeting notes to Mr. Joset Strauber, from L. Reitz re: Fit of Franklin well pumps, 12/9/83. P. 000997-000997.
- 11. Phone/meeting notes between Mr. Tucker Moorehead, Earth Data Inc. and Mr. Jack Frost, NUS Corporation, re: Pump costs and specifications, 12/8/83. P. 000998-000998.

- 12. Phone/meeting notes between Mr. Regis Thein, Duro Products and Mr. Jack Frost, NUS Corporation, re: Pump specifications, 12/8/83. P. 000999-001000.
- 13. Phone/meeting notes between Andy [sic], Adcock Woodrow and Mr. Jack Frost, NUS Corporation, re: Pump specifications, 12/7/83. P. 001001-001001.
- 14. Phone/meeting notes between Mr. Dick Taylor, A.J. Nicholas & Co. and Mr. Jack Frost, NUS Corporation re: Pump specifications, 12/7/83. P. 001002-001002.
- 15. Phone/meeting notes between Mrs. Dean, The Pump Store and Mr. Jack Frost, NUS Corporation, re: Pump specifications, 12/7/83. P. 001003-001003.
- 16. Phone/meeting notes from Mr. Joset Strauber to Mr. L. Reitz re: Submersible pumps and equipment, 12/6/83. P. 001004-001004.
- 17. Phone/meeting notes between Mr. Tucker Moorehead, Earth Data, Inc. and Mr. Jack Frost, NUS Corporation, re: Pumps and monitors, 12/6/83. P. 001005-001007.
- 18. Phone/meeting notes between Mr. Jack Frost, NUS Corporation and an unknown party re: Submersible pumps, 12/6/83. P. 001008-001008.
- 19. Phone/meeting notes between Penn Electric Motor Co. Inc. and Mr. Jack Frost, NUS Corporation, re: Submersible pumps, 12/6/83. P. 001009-001009.
- 20. Phone/meeting notes between Mr. Charlie Bandoran and Mr. Jack Frost, NUS Corporation, re: Mobile treatment systems, 12/6/83. P. 001010-001010.
- 21. Phone/meeting notes between Mr. Bob Byron, TIGG Corp. and Mr. Jack Frost, NUS Corporation, re: Treatment of well effluent, 12/5/83. P. 001011-001011.
- 22. Phone/meeting notes between Mr. Dean, The Pump Store and Mr. Jack Frost, NUS Corporation re: Submersible pumps, 12/5/83. P. 001012-001012.
- 23. Phone/meeting notes between Mr. J. J. Guenthoer, J.J. Guenthoer and Son and Mr. Jack Frost, NUS Corporation, re: Vertical turbine submersible pumps, 12/5/83. P. 001013-001013.

- 24. Phone/meeting notes between Mr. Al Bednan and Mr. Jack Frost, NUS Corporation, re: Vertical turbine pumps, 12/5/83. P. 001014-001014.
- 25. Report: Tybouts Corner Landfill Progress and Plans, November 1983 Update, (undated). P. 001015-001015.
- 26. Phone/meeting notes between Mr. Dan Hamel, NUS Corporation and Mr. Jack Frost, NUS Corporation re: Bruce Scott's illness, 11/29/83. P. 001016-001016.
- 27. Letter to Mr. Roy Schrock, U.S. EPA from Mr. Charles A. Bandoian, Environmental Resources Management, Inc., re: Plan Modification #1, 11/22/83. P. 001017-001018.
- 28. Phone/meeting notes between Mr. Roy Schrock, U.S. EPA, and Mr. George Gardner, NUS Corporation, re: Status Update, 11/22/83. P. 001019-001019.
- 29. Phone/meeting notes between Mr. Charlie D. [sic] and Mr. G.D. Gardner, NUS Corporation, re: Site comments, 11/18/83. P. 001020-001020.
- 30. Phone/meeting notes between Mr. Tucker Moorehead, Earth Data Inc. and Mr. G.D. Gardner, NUS Corporation, re: Recorder cost estimates, 10/26/83. P. 001021-001021.
- 31. Memorandum to Mr. Len Johnson, NUS Corporation from Mr. Bruce Scott, NUS Corporation, re: Work at site, 10/25/83. P. 001022-001022.
- 32. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation re: Modifications to the Work Plan, 10/17/83. P. 001023-001023.
- 33. Report: Work Plan Modification No. 1, Remedial Investigation/Feasibility Study, Tybouts Corner Landfill, New Castle, Delaware. (undated). P. 001024-001029.
- 34. Letter to NUS Corporation from Ms. Ruth K. Lloyd, Keen Compressed Gas Co. Inc. re: Credit approval, 10/5/83. P. 001030-001030.
- 35. Memorandum to File from Mr. G.D. Gardner, NUS Corporation re: Site visit of 9/28/83, 10/5/83. P. 001031-001034.

- 36. Memorandum to Mr. G.J. Meyer and G.D. Gardner, NUS Corporation, from Ms. E.A. Cardinal, NUS Corporation, re: Press advisory of 9/29/83, 10/4/83. P. 001035-001036.
- 37. Letter to Mr. Thomas Peters, Sign Shop, from Mr. George D. Gardner, NUS Corporation, re: Order for 17 signs, 10/4/83. P. 001037.
- 38. Report: Tybouts Corner Landfill Progress and Plans,

  August/September 1983 Update Draft. (undated).

  P. 001038-001039.
- 39. Phone/meeting notes from Ms. Marilynn LaRiccha to Mr. George Gardner re: Drilling permits, 9/26/83.
  P. 001040-001040.
- 40. Phone/meeting notes from Mr. Jed Callen, U.S. EPA, to Mr. George Gardner re: Site clearance, 9/26/83. P. 001041-001041.
- 41. Letter to Empire Soils Investigation, Inc. from Mr. Ramesh J. Shah of Delaware Department of Natural Resources and Environmental Control re: Permits for Tybouts Corner Site, 9/26/83. P. 001042-001042.
- 42. Well Permit Application filed by U.S. EPA to Delaware Department of Natural Resources and Environmental Control, (undated). P. 001043-001043.
- 43. Memorandum to File from Mr. George D. Gardner, NUS Corporation re: Site meeting with Mr. Roy Schrock of U.S. EPA and Mr. Dean Anderson of Empire Drilling Company, 9/21/83. P. 001044-001046.
- 44. Letter to Mr. Dave Soltis from Mr. George D. Gardner, NUS Corporation, re: Consultations with R.E. Wright Associates, Inc., 9/19/83. P. 001047-001047.
- 45. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, from Mr. George Gardner re: Status of site clearance, 9/16/83. P. 001048-001048.
- 46. Phone/meeting notes to Mr. Dean Anderson, Empire Drilling from Mr. G.D. Gardner re: Delay in drilling start date, 9/13/83. P. 001049-001049.

- 47. Phone/meeting notes to Mr. Ron Laudon from Mr. George Gardner re: Questions on financial sheets. 9/2/83. P. 001050-001051.
- 48. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, from Mr. George Gardner, re: Community meeting status, 9/2/83. P. 001052-001052.
- 49. Phone/meeting notes to Mr. Ron Laudon from Mr. George Gardner re: Return of prior call, 9/1/83. P. 001053-001053.
- 50. Phone/meeting notes to Mr. Bill Kaschak, U.S. EPA, from Mr. S. Pederson re: Financial Summary of July 1983, 8/31/83. P. 001054-001054.
- 51. Phone/meeting notes to Mr. Bill Koschak, U.S. EPA, from Mr. S. Pederson re: Financial Summary of July 1983, 8/31/83. P. 001055-001055.
- 52. Phone/meeting notes from Mr. Dan Hamel, NUS Corporation, to Mr. George Gardner re: Field work, 8/31/83. P. 001056-001056.
- 53. Telephone correspondence with Mr. Dave Soltis, NUS Corporation and Mr. George Gardner re: Status of Empire Drilling's subcontract, 8/30/83. P. 001057-001057.
- 54. Phone/meeting notes from Mr. Dave Soltis to Mr. George Gardner re: Empire Drilling credentials, 8/30/83. P. 001058-001058.
- 55. Telecon note between Mr. Roy Schrock, U.S. EPA, and Mr. George Gardner, NUS Corporation, re: Scheduling of press briefing, 8/30/83. P. 001059-001059.
- 56. Phone/meeting notes from Mr. Jed Callen, U.S. EPA, to Mr. George Gardner re: Site access, 8/24/83. P. 001060-001060.
- 57. Phone/meeting notes to Mr. Dave Soltis from Mr. George Gardner re: Decision on a driller, 8/23/83. P. 001061-001061.
- 58. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, from Mr. George Gardner re: Status of on-site trailers, 8/23/83. P. 001062-001062.

- 59. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, from Mr. George Gardner re: Press briefing at job start up, 8/22/83. P. 001063-001063.
- 60. Phone/meeting notes between Mr. Daniel R. Hamel and Mr. Jeff Patterson, DIGA Color Inc. re: OVA rentals, 8/17/83. P. 001064-001064.
- 61. Phone/meeting notes to Mr. Jeff Patterson, DIGA Color, Inc. and Mr. Daniel R. Hamel re: OVA rental. 8/17/83, P. 001065-001066.
- 62. Phone/meeting notes from Mr. Dale W. Schriever, Layne-New York Company Inc., to Mr. Daniel R. Hamel re:
  Amendments to bid package, 8/16/83. P. 001067-001068.
- 63. Phone/meeting notes to Mr. Dale W. Schriever, Layne-New York Company Inc., from Mr. Daniel R. Hamel re:
  Amendments specifications, 8/15/83. P. 001069-001071.
- 64. Phone/meeting notes between Mr. Daniel R. Hamel and Mr. Roy Schrock, U.S. EPA, re: Tax report corrections, 8/12/83. P. 001072-001072.
- 65. Phone/meeting notes from Mr. Roy Schrock of U.S. EPA to Mr. Daniel R. Hamel re: Data acquisition, site signs, OVA problems and toxicology report comments, 8/12/83. P. 001073-001075.
- 66. Letter to Mr. Robert A. Burns, NUS Corporation from M.R. Rivers of Layne-New York Company, Inc. re: Price forms, 8/12/83. P. 001076-001076.
- 67. Memorandum to Mr. George Gardner, Mr. Dave Soltis and Mr. Robert Burns from Mr. Daniel R. Hamel re: Minutes of the pre-bid meeting, 8/11/83. P. 001077-001081.
- 68. Letter to Mr. Lippincott, Lippincott Engineering Associates, from Mr. George D. Gardner, NUS Corporation, re: Amendment No. 1, 8/8/83. P. 001082-001082.
- 69. Letter to Mr. Dave Bove, NEPCO, from Mr. George D. Gardner, NUS Corporation, re: Amendment No. 1. 8/8/83. P. 001083-001083.
- 70. Letter to Mr. Lou Ontek, Diamond Drilling Company, Inc. from Mr. George D. Gardner, NUS Corporation, re:
  Amendment No. 1, 8/8/83. P. 001084-001084.

- 71. Letter to Mr. Tom Sturges, Pennsylvania Drilling Company, from Mr. George D. Gardner, NUS Corporation, re: Amendment No. 1, 8/8/83. P. 001085-001085.
- 72. Letter to Mr. Roy White, White Drilling Corp., from Mr. George D. Gardner, NUS Corporation re: Amendment No. 1, 8/8/83. P. 001086-001086.
- 73. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Health and Risk Assessment draft report, 8/8/83. P. 001087-001087.
- 74. Memorandum to Mr. Gary Waugh from Mr. George Gardner, NUS Corporation, re: OVA equipment requirements. 8/5/83, P. 001088-001088.
- 75. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. E.D. Escher, NUS Corporation re: Final Work Plan, 8/4/83. P. 001089-001089.
- 76. Meeting notes between Mr. George Gardner and Mr. Roy Schrock, U.S. EPA, re: Draft Waste Handling Plan, 8/3/83. P. 001090-001090.
- 77. Letter to Mr. George Gardner from Ms. Marilyn P. LaRiccia, Delaware Department of Natural Resources and Environmental Control, re: Delaware sampling protocol. 8/4/83. P. 001091-001091.
- 78. Letter to Mr. George Gardner, NUS Corporation, from Mr. Roy Schrock, U.S. EPA re: Site access, 7/28/83. P. 001092-001092.
- 79. Phone/meeting notes from Mr. Roy Schrock, U.S. EPA, to Mr. George Gardner re: Waste Handling Plan and site signs, 7/28/83. P. 001093-001093.
- 80. Meeting notes between Mr. George Gardner, NUS Corporation, and Delaware Department of Natural Resources and Environmental Control, re: Overall progress, 7/27/83. P. 001094-001097.
- 81. Letter to Mr. George Gardner, NUS Corporation, from Mr. Alan P. Gray, Dynamac Corporation re: Draft report of health and risk assessment, 7/25/83. P. 001098-001098.
- 82. Phone/meeting notes to Ms. Barbara Dunham, Ramada Inn, New Castle from Mr. George Gardner re: Rental of

- meeting room for pre-bid meeting, 7/25/83. P. 001099-001099.
- 83. Memorandum to File from Mr. Howard O. Wilson, U.S. EPA, re: Residential well sampling, 7/20/83. P. 001100-001102.
- 84. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, to Mr. G.D. Gardner re: Sampling data, 7/20/83.
  P. 001103-001103.
- 85. Phone/meeting notes to Mr. Abe Fertes [sic], U.S. EPA, from Mr. G.D. Gardner re: Delivery of toxicology report, 7/20/83. P. 001104-001104.
- 86. Phone/meeting notes from Mr. Alan Gray, Dynamac Corporation, to Mr. George Gardner re: Toxicology Report, 7/20/83. P. 001105-001105.
- 87. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Potential initial Remedial Measure, 7/20/83. P.001106-001107.
- 88. Phone/meeting notes to Mr. Walter Lee, U.S. EPA, from Mr. G.D. Gardner re: Water analysis for residential wells, 7/19/83. P. 001108-001109.
- 89. Memorandum to Mr. Daniel K. Donnelly from Mr. Rick Dreisch, U.S. EPA, re: Sample results, 7/19/83. P. 001110-001112.
- 90. Letter to Ms. Marilyn LaRiccia, Delaware Department of Natural Resources and Environmental Control, from Mr. Daniel R. Hamel, NUS Corporation, re: Logs and records of drilling, 7/19/83. P. 001113-001114.
- 91. Phone/meeting notes between Mr. George Gardner and Mr. Al Gray, Dynamac re: Toxicology Report, 7/18/83. P. 001115-001115.
- 92. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, from Mr. George Gardner re: Initial remedial measures, 7/18/83. P. 001116-001116.
- 93. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, from Mr. George Gardner re: Signing of consent decree, 7/14/83. P. 001117-001117.
- 94. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Remedial

- Investigation/Feasibility Study Draft Work Plan, 7/12/83. P. 001118-001119.
- 95. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, from Mr. George Gardner re: Domestic well samplings and status of on-site activities, 7/8/83. P. 001120-001121.
- 96. Phone/meeting notes to Mr. Paul Frieman from M. Ulintz re: Domestic well sampling, 7/7/83. P. 001122-001122.
- 97. Phone/meeting notes from Mr. Paul Frieman to M. Ulintz re: Surface water samples, 7/7/83. P. 001123-001123.
- 98. Letter to Mr. Abe Ferdas, U.S. EPA, from Mr. Stephen F. Pedersen, NUS Corporation, re: Toxicological Study, 7/6/83. P. 001124-001124.
- 99. Phone/meeting notes to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner re: Validations on water wells, 7/6/83. P. 001125-001125.
- 100. Memorandum to Mr. E. Dennis Escher, Mr. G.F. Smith, Mr. D. Threlfull and Mr. R.M. Burd from Mr. Stephen F. Pedersen, NUS Corporation, re: Toxicological Study -- Drinking Water Wells, 7/1/83. P. 001126-001126.
- 101. Letter to Mr. C.L. Andrews, Jr. from Mr. George D. Gardner, NUS Corporation re: Results of analyses of well water samples, 7/1/83. P. 001127-001127.
- 102. Letter to Mr. E. Dennis Escher, NUS Corporation, from Mr. Abraham Ferdas, U.S. EPA, re: request for modification of Task 15, 7/1/83. P. 001128-001128.
- 103. Phone/meeting notes to Mr. Abe Ferdas, U.S. EPA, from Mr. S. Pederson re: Well analyses, 7/1/83. P. 001129-001129.
- 104. Letter to Mr. L.M. Webb from Mr. George D. Gardner, NUS Corporation, re: Results of analyses of well water samples, 7/1/83. P. 001130-001130.
- 105. Letter to Mrs. Baker from Mr. George D. Gardner, NUS Corporation, re: Results of analyses of well water samples, 6/30/83. P. 001131-001131.

- 106. Phone/meeting notes to Ms. Kathy Hodgkiss, U.S. EPA, from Mr. George D. Gardner re: Validations of lab data Baker's Well, 6/30/83. P. 001132-001132.
- 107. Phone/meeting notes from Ms. Marilyn LaRiccia, Delaware Department of Natural Resources and Environmental Control, to Mr. George D. Gardner re: Baker's Well, 6/30/83. P. 001133-001133.
- 108. Phone/meeting notes from Ms. Kathy Hodgkiss, U.S. EPA, to Mr. George Gardner re: Validation of well samples, 6/29/83. P. 001134-001134.
- 109. Letter to Mr. Roy Schrock, U.S. EPA, from Ms. Debora B. Thompson, NUS Corporation re: Summary of sampling, 6/29/83. P. 001135-001135.
- 110. Phone/meeting notes from Ms. Chris Altomari, U.S. EPA, to Mr. George Gardner re: Domestic well test results, 6/23/83. P. 001136-001136.
- 111. Memorandum to Mr. Harry W. Otto from Mr. Gregory Mitchell and Mr. Robert Garrow re: Finfish collections at Red Lion Creek, Army Creek and Jonas River, 6/17/83. P. 001137-001139.
- 112. Phone/meeting notes to Mr. Frank Lamda from Mr. George Gardner, NUS Corporation, re: Site surveys, 6/16/83. P. 001140-001140.
- 113. Phone/meeting notes to Mr. Al Kupiec, NUS Corporation, from Mr. G. Gardner re: Use of NUS Corporation labs for validation, 6/15/83. P. 001141-001141.
- 114. Phone/meeting notes to Mr. Bob Bourns from Mr. George Gardner re: Lab purchase orders. 6/15/83. P. 001142-001142.
- 115. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. George Gardner re: Site Work -- Validation, 6/15/83. P. 001143-001144.
- 116. Phone/meeting notes from Mr. Dave Soltis to Mr. George Gardner re: Charge number for NUS Lab, 6/15/83. P. 001145-001145.
- 117. Letter to Ms. Chris Altomari, U.S. EPA, from Ms. Debora B. Thompson, NUS corporation, re: Sampling of domestic wells, 6/14/83. P. 001146-001146.

- 118. Letter to Mr. Thomas Pepper, NUS Corporation, from Mr. Robert H. Simmons, U.S. Department of the Interior, re: Bench marks, 6/14/83. P. 001147-001148.
- 119. Phone/meeting notes to Mr. Simmonds from Mr. Thomas Pepper re: Vertical control monumentation, 6/10/83. P. 001149-001149.
- 120. Phone/meeting notes to National Oceanographic and Atmosphere Administration (NOAA) from Mr. Thomas Pepper re: Horizontal control monumentation, 6/10/83.
  P. 001150-001150.
- 121. Letter to Ms. Christine Altomari, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Clearance for site access, 6/10/83. P. 001151-001151.
- 122. Phone/meeting notes to Mr. C.R. Cole, Battelle Northwest Lab., from Mr. G.D. Gardner re: Groundwater Remedial Action Impact Model, 6/3/83. P. 001152-001153.
- 123. Letter to Ms. Chris Altomari, U.S. EPA, from Ms. Debora B. Thompson, NUS Corporation re: Sampling of domestic wells, 6/3/83. P. 001154-001154.
- 124. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. George Gardner re: NUS lab certification and registration, 6/3/83. P. 001155-001155.
- 125. Letter to Mr. Emil Onuschak, Jr. from Mr. George D. Gardner, NUS Corporation re: Summary of work done by Mr. Gardner, 6/3/83. P. 001156-001157.
- 126. Memorandum to Field Personnel from Mr. G.D. Gardner, NUS Corporation, re: Procedures for assessing and documenting existing monitoring wells, 6/2/83. P. 001158-001161.
- 127. Phone/meeting notes to Battelle and U.S. EPA from Mr. G.D. Gardner re: Computer program for analyzing Remedial Action Impacts, 6/2/83. P. 001162-001162.
- 128. Phone/meeting notes to Mr. Ken Woodruff and Mr. John Talley from Mr. G.D. Gardner re: Geology and Geophysics at site, 6/2/83. P. 001163-001163.

- 129. Phone/meeting notes to Ms. Peg Marple, NUS Corporation, from Mr. George D. Gardner re: NUS Lab Certification, 6/2/89. P. 001164-001164.
- 130. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. George D. Gardner re: Work Plan/Schedule, 6/1/83. P. 001165-001166.
- 131. Phone/meeting notes to Mr. Bart Marcy, NUS Corporation from Mr. G.D. Gardner re: Red Lion Creek Report. 6/1/83. P. 001167-001167.
- 132. Letter to Ms. Chris Altomari, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Comments to the Draft Work Plan, 5/27/83. P. 001168-001177. Comments are attached.
- 133. Memorandum to Mr. Al Kupiec and Mr. E. Dennis Escher from Mr. R.M. Burd, NUS Corporation, re: Organic Analysis Data Validation, 5/25/83. P. 001178-001178.
- 134. Letter to Mr. George Gardner, NUS Corporation, from Ms. Christine Altomari, U.S. EPA, re: Analytical results of residential wells, 5/25/83. P. 001179-001179.
- 135. Letter to Ms. Chris Altomari, U.S. EPA, from Ms. Debora B. Thompson, NUS Corporation, re: Water quality of domestic wells, 5/23/83. P. 001180-001180.
- 136. Letter to Ms. Chris Altomari, U.S. EPA, from Ms. Debora B. Thompson, NUS Corporation, re: Organic analyses of results, 5/20/83. P. 001181-001181.
- 137. Phone/meeting notes to Mr. Bart Marcy, NUS Corporation, from Mr. G.D. Gardner re: Environmental Assessment, 5/16/83. P. 001182-001182.
- 138. Phone/meeting notes from Mr. Bart Marcy, NUS Corporation, to Mr. George Gardner re: Environmental Assessment of Red Lion Creek, 5/12/83. P. 001183-001183.
- 139. Phone/meeting notes from Ms. Chris Altomari, U.S. EPA, to Mr. George Gardner re: March invoice, 5/12/83. P. 001184-001184.
- 140. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. G.D. Gardner re: Health and Safety reconnaissance, 5/10/83. P. 001185-001185.

- 141. Phone/meeting notes from Mr. Jed Callen, U.S. EPA, to Mr. G.D. Gardner re: Insurance certificate, 5/10/83. P. 001186-001186.
- 142. Phone/meeting notes to Mr. Terry Conway, NUS Corporation, from Mr. G.D. Gardner re: Environmental Assessment, 5/10/83. P. 001187-001187.
- 143. Letter to Mr. Mark S. Ulintz, NUS Corporation, from Ms. Marilyn P. LaRiccia, Delaware Department of Natural Resources and Environmental Control, re: Neilson questionnaires, 5/9/83. P. 001188-001188.
- 144. Memorandum to distribution from A.K. Bomberger, NUS Corporation re: Todd Gilmers review, 5/4/83.
  P. 001189-001192. The comments are attached.
- 145. Phone/meeting notes from Ms. Chris Altomari, U.S. EPA, to Mr. G.D. Gardner re: Meeting of April 5, 1983, 4/31/83. P. 001193-001194.
- 146. Phone/meeting notes between Mr. Bob Lucas, Mr. Bill Wells, Ms. Kitty Gardner and Mr. Mike McCarthy re: Onsite and off-site CR, 4/29/83. P. 001195-001196.
- 147. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. G.D. Gardner re: Status Report, delivery procedure, evaluation of trailer costs, 4/29/83. P. 001197-001198.
- 148. Letter to Ms. Mari Lynn [sic] LaRiccia, Delaware Department of Natural Resources and Environmental Control, from Mr. Mark S. Ulintz, NUS Corporation, re: Questionnaire responses. P. 001199-001199.
- 149. Phone/meeting notes to Tax Mapping Office of New Castle County, Delaware from Mr. Bill Wells re: Tax Maps, 4/26/83. P. 001200-001200.
- 150. Phone/meeting notes to Ms. Marilyn Sheldon, United States Geodetic Survey, from Mr. Bill Wells re: Horizontal and vertical bench mark information, 4/26/83. P. 001201-001201.
- 151. Letter to Mr. A. Ferdas, U.S. EPA, from Mr. R. M. Burd, NUS Corporation, re: Forms required for intended sampling, 4/22/83. P. 001202-001202.

- 152. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. G.D. Gardner re: Domestic well sampling, 4/25/83. P. 001203-001203.
- 153. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. G.D. Gardner re: Field sampling of domestic wells, 4/20/83. P. 001204-001204.
- 154. Phone/meeting notes from Ms. Chris Altomari, U.S. EPA, to Mr. G.D. Gardner re: Field sampling of domestic wells, 4/20/83. P. 001205-001205.
- 155. Memorandum to Mr. Don Couchman from Mr. Gil Meyer, NUS Corporation, re: Public meeting contact, 4/19/83. P. 001206-001206.
- 156. Letter to Mr. R.L. McClenaghan, Civic League for New Castle County, from Mr. Gilbert J. Meyer Jr., NUS Corporation, re: Resume of NUS Corporation, 4/18/83. P. 001207-001208.
- 157. Phone/meeting notes from Ms. Chris Altomari, U.S. EPA, to Mr. G.D. Gardner re: Domestic well sampling program, 4/18/83. P. 001209-001209.
- 158. Memorandum to Ms. Donna Wallace from Mr. Daniel R. Hamel, NUS Corporation, re: Transmittal of RAMP, 4/15/83. P. 001210-001210.
- 159. Phone/meeting notes from Ms. Chris Altomari, U.S. EPA, to Mr. G.D. Gardner re: Start-up and water sampling of domestic wells, 4/14/83. P. 001211-001211.
- 160. Phone/meeting notes to Mr. Garth Glenn from W.K. Wells re: Aerial mapping firms, 4/5/83. P. 001212-001212.
- 161. Memorandum to File from Mr. Gilbert J. Meyer, NUS Corporation, re: Public Meeting, 4/5/83. P. 001213-001216.
- 162. Phone/meeting notes from Mr. Jed Callen, U.S. EPA, to Mr. G.D. Gardner re: Word's indemnity clause, 4/1/83. P. 001217-001217.
- 163. Memorandum to file from Mr. George D. Gardner of NUS Corporation, re: Trip report, 3/30/83. P. 001218-001222.

- 164. Phone/meeting notes between Mr. Mike Apgar, Delaware Department of Natural Resources and Environmental Control, and Mr. S.A. Werlizy re: Submission of forms, 3/30/83. P. 001223-001223.
- 165. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, and Mr. G.D. Gardner re: On-site inspection of trailers, 3/30/83. P. 001224-001224.
- 166. Phone/meeting notes between Ms. Chris Altomari, U.S. EPA, and Mr. G.D. Gardner re: On-site visit of command post, 3/29/83. P. 001225-001226.
- 167. Phone/meeting notes to Mr. Bob Burns, NUS Corporation, from Mr. G.D. Gardner re: Advice and decision to proceed, 3/29/83. P. 001227-001227.
- 168. Phone/meeting notes to Mr. Bob Burns, NUS Corporation, from Mr. G.D. Gardner re: Insurance Indemnity Clause, 3/28/83. P. 001228-001228.
- 169. Phone/meeting notes from Ms. Linda Bournazian, U.S. EPA, from Mr. A. Bomberger re: Interim approval to initiate Remedial Investigation, 3/28/83. P. 001229-001229.
- 170. Phone notes from Ms. Chris Altomari, U.S. EPA, to Mr. George Gardner re: Interim Approval of Work Plan, 3/28/83. P. 001230-001230.
- 171. Phone meeting notes to E.D.E. from G.M., re: Community meeting of 3/24/83, 3/25/83. P. 001231-001231.
- 172. Phone/meeting notes from Mr. Paul Goldstein, NUS Corporation, to Mr. G.M. re: Community meeting, 3/25/83. P. 001232-001232.
- 173. Meeting notes between Mr. G.D. Gardner and Delaware Department of Natural Resources and Environmental Control and U.S. EPA re: Work Plan modifications, 3/24/83. P. 001233-001236.
- 174. Meeting notes between Mr. GDG and U.S. EPA re: Work Plan discussions, 3/24/83. P. 001237-001244. The Work Plan comments are attached.
- 175. Meeting notes between Mr. G.D. Gardner and Ms. Chris Altomari, U.S. EPA, and Mr. Jed Callen, U.S. EPA, re:

- Work Plan modification comments, 3/24/83. P. 001245-001245.
- 176. Press Release: U.S. EPA Environmental News <u>EPA and the State of Delaware Announce Superfund Financed Studies at Tybouts Corner Landfill</u>, 3/23/83. P. 001246-001247.
- 177. Phone/meeting notes to Mr. Joe Donovan, U.S. EPA, from G.M. [sic] re: Media attention at site, 3/22/83. P. 001248-001248.
- 178. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. G.D. Gardner re: Work Plan -- Comments and Requested Modifications, 3/22/83. P. 001249-001249.
- 179. Phone/meeting notes from Mr. Kenn Speicher, NUS Corporation, to G.M. [sic] re: Summary of press coverage, 3/22/83. P. 001250-001250.
- 180. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. G.D. Gardner re: Community and Work Plan meetings, 3/21/83. P. 001251-001251.
- 181. Memorandum to Mr. Dave Noble from Ms. Christine Altomari, U.S. EPA, re: Interim approval of Work Plan, 3/24/83. P. 001252-001252.
- 182. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. G.D. Gardner re: Draft Work Plan, 3/15/83. P. 001253-001253.
- 183. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. G.D. Gardner re: Work Plan, 3/14/83. P. 001254-001254.
- 184. Phone/meeting notes between Mr. G.D. Gardner and Ms. Chris Altomari, U.S. EPA, re: Work Plans, 3/8/83. P. 001255-001255.
- 185. Phone/meeting notes to Ms. C. Altomari, U.S. EPA, from Mr. G.D. Gardner re: Work Plans, 3/1/83. P. 001256-001256.
- 186. Speed letter to Ms. Christine Altomari, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Preliminary Draft of Remedial Investigation/ Feasibility Study, 2/28/83. P. 001257-001257.

- 187. Phone/meeting notes between Mr. G.D. Gardner and Mr. Craig Robertson, R.E. Wright Associates, re: Details of RAMP, 2/22/83. P. 001258-001258.
- 188. Meeting notes between Mr. Craig Robertson, R.E. Wright Associates, Inc. and Mr. G.D. Gardner re: Work Plan, 2/22/83. P. 001260-001267.
- 189. Letter to Ms. Christine Altomari, U.S. EPA, from Mr. Arthur K. Bomberger, NUS Corporation, re: Transmittal of RI/FS Work Assignment, 2/18/83. P. 001268-001268.
- 190. Phone/meeting notes from Mr. Art. B. [sic], NUS Corporation, to Mr. G.D. Gardner re: Proposed modifications to the Work Plan, 2/17/83. P. 001269-001270.
- 191. Phone notes to Mr. Craig Robertson, R.E. Wright Assoc., Inc., and Mr. G.D. Gardner re: RAMP, 2/17/83. P. 001271-001271.
- 192. Letter to Mr. William R. Topping, U.S. EPA, from Mr. Robert A. Burns, NUS Corporation, re: Request for schedule change for Draft Work Plan delivery, 2/11/83. P. 001272-001273.
- 193. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from A.K.B. [sic] re: Permission to direct questions to R.E. Wright Associates, Inc., 2/10/83. P. 001274-001274.
- 194. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. A. Bomberger re: General information on Work Plan, 2/9/83. P. 001275-001275.
- 195. Letter to Mr. Art Bomberger, NUS Corporation, from Ms. Chris Altomari, U.S. EPA, re: Transmittal of RAMP, 2/9/83. P. 001276-001276.
- 196. Phone/meeting notes to Ms. Chris Altomari, U.S. EPA, from Mr. A. Bomberger re: Work Plan preparation schedule, 2/8/83. P. 001277-001277.
- 197. Letter to Mr. Burns, NUS Corporation, from Mr. William R. Topping, U.S. EPA, re: The contractual document, 1/20/83. P. 001277-001277.
- 198. Memorandum to Mr. A. Bomberger, Mr. E. Eschera, Mr. A. McClure and Mr. Bill Adams from Mr. Dan Threlfall, NUS

- Corporation, re: Coordination of U.S. EPA and the State of Delaware, 1/19/83. P. 001278-001279.
- 199. Letter to Mr. Peter Bibko, U.S. EPA, from Mr. John E. Wilson, Delaware Department of Natural Resources and Environmental Control re: Site studies and Responsible Party searched, 1/17/83. P. 001280-001280.
- 200. Superfund State Contract for Remedial Activities at Tybouts Corner Landfill Between the State of Delaware and the U.S. EPA. Signed 1/12/83 and 1/17/83. P. 001281-001289.
- 201. Memorandum to Mr. A.F. McClure and Mr. A. Bomberger from Mr. Dan Threlfall, NUS Corporation, re: Transmittal of reports, 1/4/83. P. 001290-001290.

### VI. TRIP REPORTS

- Memorandum to Mr. D.E. MacIntyre, NUS Corporation and, Mr. Dan Hamel, NUS Corporation, from Mr. G.D. Gardner, NUS Corporation, re: March 19, 1985, site visit, 3/25/85. P. 001291-001292.
- 2. Report: <u>Trip Report, Tybouts Corner Landfill, January 16 and 17, 1983</u>, prepared by Mr. William K. Wells, (undated). P. 001293-001294.
- 3. Report: <u>Trip Report, Tybouts Corner Landfill Site, January 14-19, 1983</u>, prepared by Ms. Denice Taylor, (undated). P. 001295-001310. The following are attached:
  - a) a Sample Bottling and Preparation table;
  - b) a Sample Tag Numbers table;
  - c) a Well Data table;
  - d) a Sample Data table;
  - e) a Site Safety Follow-up Report.
- 4. Memorandum to File from Mr. G.D. Gardner, NUS Corporation, re: October 25, 1984, site visit, 10/31/84. P. 001311-001311.
- 5. Report: Trip Report, Tybouts Corner Landfill, August 28, 1984, prepared by Mr. Daniel R. Hamel, 8/30/84. P. 001312-001313.
- 6. Report: <u>Trip Report, Tybouts Corner Landfill, August 21, 1984</u>, prepared by Mr. D.R. Hamel, (undated). P. 001314-001315.
- 7. Report: <u>Trip Report, Tybouts Corner Landfill, New Castle County, Delaware, August 13, 1984</u>, prepared by Mr. G.D. Gardner, 9/18/84. P. 001316-001318.
- 8. Report: <u>Trip Report, Tybouts Corner Landfill</u>, prepared by Mr. Daniel R. Hamel, (undated). P. 001319-001321.
- 9. Report: Trip Report, Tybouts Corner Landfill, April 29 through May 9, 1984, prepared by Mr. Bruce Scott, (undated). P. 001322-001327. A May 1984 Sampling table and a Tybouts May table are attached.

- 10. Report: <u>Trip Report, Tybouts Corner Landfill, February 14, 1984 through February 19, 1984</u>, prepared by W.K. Wells, (undated). P. 001328-001331.
- 11. Report: Trip Report, Tybouts Corner Landfill, February 12 through 13, 1984, prepared by J.M. Strenko, (undated). P. 001332-001336. An Analytical Report Form is attached.
- 12. Memorandum to Mr. S. F. Pedersen, NUS Corporation, Mr. D. Threlfall, NUS Corporation, Mr. D.R. Brenneman, NUS Corporation, and A. Nazar, NUS Corporation, from Mr. G.D. Gardner, NUS Corporation, re: January 19, 1984 site visit and meeting, 1/24/84. P. 001337-001339.
- 13. Memorandum to File from Mr. G.V. Gartseff, NUS Corporation, re: Trip Report, 1/20/84. P. 001340-001340.
- 14. Report: <u>Trip Report, Tybouts Corner Landfill, January 16 through 28, 1984</u>, prepared by Mr. Roy H. Conley, (undated). P. 001341-001350.
- 15. Memorandum to File from Mr. G.D. Gardner, NUS Corporation, re: January 3, 4, 5, 1984, site visit, 1/16/84. P. 001351-001353.
- 16. Memorandum to File from Mr. G.D. Gardner, NUS Corporation, re: December 20-21, 1983, site visit, 12/29/83. P. 001354-001356.
- 17. Memorandum to Mr. Steve Pedersen, NUS Corporation, from Mr. George Gardner, NUS Corporation, re: December 1, 1983, field investigation, 12/19/83. P. 001357-001359.
- 18. Memorandum to File from Mr. G.D. Gardner, NUS Corporation, re: October 18 and 19, 1983, site visit, 10/25/83. P. 001360-001362.
- 19. Memorandum to File from Mr. Jack M. Peterson, NUS Corporation, re: Trip Report, 10/12/83. P. 001363-001366. A hand-drawn site map and a Air Sampling table with a memorandum explaining the table are attached.
- 20. Memorandum to Mr. George Gardner, NUS Corporation, from Mr. B.C. Marcy, NUS Corporation, re: Site visit, 6/14/83. P. 001367-001372. The Trip Report is attached.

- 21. Memorandum to File from Mr. G.D. Gardner, NUS Corporation, re: June 7, 1983, site visit, 6/13/83. P. 001373-001376.
- 22. Memorandum to File from Mr. G.D. Gardner, NUS Corporation, re: June 8, 1983, site visit and meeting, 6/13/83. P. 001377-001380.
- 23. Memorandum to File from Mr. D.B. Thompson, NUS Corporation, and Mr. M.S. Ulintz, NUS Corporation, re: Trip report and sampling of domestic wells, 5/17/83. P. 001381-001383. A site map and a Sample Description table are attached.
- 24. Memorandum to File from Mr. W.K. Wells, NUS Corporaiton, re: Aerial ground control daily activities, 5/7/83. P. 001384-001384.
- 25. Handwritten Report: <u>Survey Report, Tybouts Corner Landfill Site -- Delaware, Jan. 16, 17 & Jan. 24, 25, prepared by Mr. Bob Lucas and Mr. Tom Pepper, 2/28/85. P. 001385-001386.</u>
- 26. Handwritten memorandum to File from Mr. T.M. Pepper re: Summary Report, 3/1/89. P. 001387-001390.
- 27. Survey Report for the Tybouts Corner Landfill, 5/5/83. P. 001391-001391.
- 28. Survey Report, 5/4/83. P. 001392-001401. The following are attached:
  - a) a handwritten surface points;
  - b) a handwritten field book page;
  - c) an Aerial Control Traverse/Adjust Table.
- 29. Handwritten memorandum to U.S. EPA from T. Pepper, NUS Corporation, re: Highway Project, 2/15/84. P. 001402-001407. Handwritten street maps are attached.
- 30. Handwritten memorandum to U.S. EPA from T.M.P [sic], NUS Corporation, re: Additional monitoring well locations, 1/25/85. P. 001408-001425. Handwritten maps, survey sheets and grid coordinate equations are attached.
- 31. Handwritten Report: Quality Assurance Work Plan for Tybouts Corner Landfill, 2/13/84. P. 001426-001429.

32. Handwritten Report: <u>Tybouts Corner Landfill Site</u>
<u>Mapping & Survey Activities</u>, 2/9/84. P. 001430-001464.

## VII. LAB SOIL TESTING

1. Report: <u>Laboratory Soil Testing, Tybouts corner Landfill, New Castle County, Delaware</u>, prepared by Empire Soil Investigations Inc., 4/84. P. 001465-001539.

## VIII. RED LION CREEK REPORTS

1. Report: A Preliminary Report on the Quality of the Tidal Zone of Red Lion Creek, prepared by Bruce R. Pluta, NUS Corporation, 5/20/83. P. 001540-001714.

## IX. <u>DAILY LOGS</u>

 Tybouts Corner Landfill Remedial Investigation/ Feasibility Study Daily Record, 2/17/84-9/26/83.
 P. 001715-002141.

## X. <u>DATA VALIDATION</u>

- 1. Quality Assurance Review of Inorganic Analysis Lab Data Package, 2/11/84. P. 002142-002205.
- 2. Quality Assurance Review of Inorganic Analysis Lab Data Package, 4/2/84. P. 002206-002239.

### XI. FIELD DATA AND SAMPLING NOTEBOOKS

- 1. Handwritten Field Data Notes, prepared by SJM [sic], NUS Corporation, and TJH [sic], NUS Corporation, (undated). P. 002240-002355.
- 2. Field Book for the Tybouts Corner Landfill -- Delaware, Book No. 1, (undated). P. 002356-002395.
- 3. Field Book for the Tybouts Corner Landfill -- Delaware, Book No. 2, (undated). P. 002396-002435.
- 4. Report: <u>NUS Corporation</u>, <u>Sampling Notebook</u>, prepared by NUS Corporation, (undated). P. 002436-002822.

# XII. <u>CALCULATONS - COST ESTIMATES</u>

1. Pricing Sheets for Tybouts Corner Landfill, 4/18/85. P. 002823-002965.

## XIII. FOCUSED FEASIBILITY STUDY (FFS)

1. Report: Focused Feasibility Study, Water Supply Alternatives, Tybouts Corner Landfill, New Castle County, Delaware, prepared by NUS Corporation, 7/84. P. 002966-003012.

## XIV. <u>HEALTH AND RISK ASSESSMENT</u>

1. Report: <u>Health and Risk Assessment for Residential Waste Wells, Tybouts Corner Landfill, New Castle County, Delaware</u>, prepared by NUS Corporation, 9/83. P. 003013-003038.

### XV. REMEDIAL INVESTIGATIONS/FEASIBILITY STUDY

- 1. Report: Remedial Investigation/Feasibility Study
  Report, Volume I, Tybouts Corner Landfill, New Castle
  County, Delaware, prepared by George D. Gardner, NUS
  Corporation, 6/85. P. 003039-003364.
- 2. Report: Remedial Investigation/Feasibility Study
  Report, Volume II Appendices, Tybouts Corner Landfill,
  New Castle County, Delaware, prepared by George D.
  Gardner, NUS Corporation, 6/85. P. 003365-003642.
- 3. Report: Remedial Investigation/Feasibility Study
  Report, Volume III Appendices, Tybouts Corner Landfill,
  New Castle County, Delaware, prepared by George D.
  Gardner, NUS Corporation, 6/85. P. 003643-003913.
- 4. Report: Remedial Investigation/Feasibility Study
  Report, Volume IV Appendices, Tybouts Corner Landfill,
  New Castle County, Delaware, prepared by George D.
  Gardner, NUS Corporation, 6/85. P. 003914-004253.
- 5. Report: Remedial Investigation/Feasibility Study
  Report, Volume V Appendices, Tybouts Corner Landfill,
  New Castle County, Delaware, prepared by George D.
  Gardner, NUS Corporation, 6/85. P. 004254-004478.

## XVI. RECORD OF DECISION

1. Record of Decision, Remedial Alternative Selection for Tybouts Corner Landfill, New Castle County, Delaware, 3/6/86. P. 004479-004565.

### XVII. COMMUNITY RELATIONS PLAN (CR PLAN)

- 1. Report: <u>Meeting Summary, Tybouts Corner Landfill Site,</u>
  <u>Tybouts Corner, New Castle County, Delaware</u>, 7/23/85.
  P. 004566-004573. A summary of comments are attached.
- 2. Report: <u>Community Relations Contact Report</u>, prepared by Mr. D. Hamel, NUS Corporation, and Mr. Tim Hill, NUS Corporation, 10/8/83. P. 004574-004574.
- 3. Report: <u>Community Relations Contact Report</u>, prepared by Mr. George D. Gardner, NUS Corporation, 8/3/83. P. 004575-004575.
- 4. Report: <u>Community Relations Contact Report</u>, prepared by Mr. David R. Hamel, NUS Corporation, 8/3/83. P. 004576-004576.
- 5. Report: <u>Community Relations Contact Report</u>, prepared by Mr. Daniel R. Hamel, NUS Corporation, and Mr. Todd Gilmer, NUS Corporation, (undated). P. 004577-004577.
- 6. Memorandum to Mr. G.J. Meyer, NUS Corporation, and Mr. G.D. Gardner, NUS Corporation, re: Public Meeting, 10/5/83. P. 004578-004580.
- 7. Memorandum to File from Mr. Gilbert J. Meyer, NUS Corporation, re: Public Meeting, 4/5/83. P. 004581-004584.
- 8. Memorandum to File from Mr. George D. Gardner, NUS Corporation, re: Trip Report, 3/30/83. P. 004585-004589.
- 9. Report: <u>Community Relations Plan for Remedial Action</u>
  <u>at Tybouts Corner, New Castle County, Delaware</u>,
  (undated). P. 004590-004593.
- 10. Letter to Ms. E. Ann Cardinal, U.S. EPA, from Mr. Gilbert J. Meyer, Jr. and Mr. David E. MacIntyre, NUS Corporation, re: Transmittal of the Draft Community Relations Plan, 11/11/85. P. 004594-004621. The Planis attached.

#### XVIII.STATE/EPA CORRESPONDENCE

- 1. Letter to Mr. James T. Duffield, Duffield Associates, Inc., from Mr. Ed Shoener, U.S. EPA, re: Proposed cap, 11/6/85. P. 004622-004622.
- 2. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. R. W. Ladd, Texaco Refining and Marketing Inc., re: Eight inch drilled well (Well R6-8L), 5/20/85. P. 004623-004625.
- 3. Letter to Mr. W. T. Carson, Wilmington Suburban Water Corp., from Mr. Richard B. Howell, III, State of Delaware Department of Health and Social Services, re: Water main extension, certificate of approval #85-12, 3/25/85. P. 004626-004628. The State Conditions are attached.
- 4. Letter to Mr. Frank Bush, J.T. Ward and Son Contractors, Inc., from Ms. Susan Scarloss, Wilmington Suburban Water Corp., re: Requirements for a 5/8" meter installation, 3/19/85. P. 004629-004631. The Requirements are attached.
- 5. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. John E. Sullivan, New Castle County Department of Law, re: Alternate water source, 2/28/85. P. 004632-004633.
- 6. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Joseph W. Weik, Stanley T. Zajkowski Law Offices, re: Resident's lawsuit, 2/13/85. P. 004634-004634.
- 7. Letter to the Honorable John E. Wilson, III, Delaware Department of Natural Resources and Environmental Control, from Mr. Stephen T. Golding, State of Delaware Office of the Budget, re: State issues, 12/20/84. P. 004635-004635.
- 8. Memorandum to Mr. Abraham Ferdas, U.S. EPA, from Mr. Roy Schrock, U.S. EPA, re: Conceptual design changes for Tybouts waterline, 12/7/84. P. 004636-004636.
- 9. Preliminary Reviews, Tybouts Corner Water Supply Extension, prepared by Ms. Francine Booth, Office of the Budget, 12/3/84. P. 004637-004638.

- 10. Letter to distribution from Ms. Judith A. Dorsey, U.S. EPA, re: Tybouts Remedial Investigation/ Feasibility Study, 11/28/84. P. 004639-004630.
- 11. Sampling and Analysis Service Request Form, prepared by Mr. Roy Schrock, U.S. EPA, 11/28/84. P. 004641-004641.
- 12. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Robert J. Tosekey, Delaware Department of Natural Resources and Environmental Control, re: Alternative water supply, 11/16/84. P. 004642-004642.
- 13. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Michael A. Apgar, Delaware Department of Natural Resources and Environmental Control, re: Extension of public water, 10/10/84. P. 004643-004643.
- 14. Letter to Ms. Judith Dorsey, U.S. EPA, from Mr. James T. Duffield, Duffield Associates, Inc., re: Water line extension, 9/5/84. P. 004644-004650. Two location sketches and a cost summary table are attached.
- 15. Letter to Mr. Thomas P. Eichler, U.S. EPA, from Mr. Robert J. Touhey, Delaware Department of Natural Resources and Environmental Control, re: Focus Feasibility Study for Water Supply Alternatives, 8/23/84. P. 004651-004653.
- 16. Letter to Mr. Thomas P. Eichler, U.S. EPA, from Mr. Robert J. Touhey, Delaware Department of Natural Resources and Environmental Control, re: Focus Feasibility Study, (undated). P. 004654-004656.
- 17. Letter to Mr. Thomas P. Eichler, U.S. EPA, from Mr. Robert J. Touhey, Delaware Department of Natural Resources and Environmental Control, re: Focus Feasibility Study for Water Supply Alternatives, 8/23/84. P. 004657-004659.
- 18. Memorandum to Mr. Robert J. Touhey, Delaware Department of Natural Resources and Environmental Control, from Mr. P. Steven Young, Delaware Department of Natural Resources and Environmental Control, re: Focus Feasibility Study for Water Supply Alternatives, 8/23/84. P. 004660-004661.
- 19. Letter to Mr. Roy Schrock, U.S. EPA from Mr. Jeffrey G. Mack, House of Representatives, State of Delaware, re:

Alternative water source options, 8/20/84. P. 004662-004664.

- 20. Letter to Mr. Robert C. Pickert, Delaware Department of Natural Resources and Environmental Control, from Charles A. Bandoian, Environmental Resources Management, Inc. re: Water supply alternatives, 8/20/84. P. 004665-004667.
- 21. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Richard T. Davis, House of Representatives, State of Delaware, re: Water supply alternatives, 8/17/84. P. 004668-004670.
- 22. Letter to Mr. Charles A. Bandoian, Environmental Resources Management, Inc., from Mr. Robert C. Pickert, Delaware Department of Natural Resources and Environmental Control, re: Water supply alternatives, 8/14/84. P. 004671-004671.
- 23. Fact Sheet on status of Tybouts Corner Remedial Investigation, 6/11/84. P. 004672-004672.
- 24. Letter to distribution from Ms. Judith A. Dorsey, U.S. EPA, re: Sampling at Tybouts Corner Landfill, 5/8/84. P. 004673-004673.
- 25. Letter to Mr. Thomas Voltaggio, U.S. EPA, from Mr. Richard T. Collins, New Castle County Office of the Executive, re: New Executive Assistant, 3/9/84. P. 004674-004674.
- 26. Memorandum to Mr. Lee M. Thomas, U.S. EPA, from Mr. Thomas P. Eichler, U.S. EPA, re: Expense reimbursement, 2/1/84. P. 004675-004675.
- 27. Letter to Mr. Thomas P. Eichler, U.S. EPA, from Mr. Jeffrey G. Mack, House of Representatives, State of Delaware, re: Public water extension, 1/13/84. P. 004676-004677.
- 28. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. R.W. Ladd, Getty Refining and Marketing Company, re: Monitoring wells, 1/9/84. P. 004678-004678.

- 29. Memorandum to file from Mr. Roy Schrock, U.S. EPA, re: Extension of water supply, 12/15/83. P. 004679-004681.
- 30. Memorandum to Mr. Lee M. Thomas, U.S. EPA, from Mr. Thomas P. Eichler, U.S. EPA, re: Reimbursement of private party costs, 11/30/83. P. 004682-004683.
- 31. Letter to Empire Soils Investigation, Inc. from Mr. Ramesh J. Shah, Delaware Department of Natural Resources and Environmental Control, re: Permits, 9/26/83. P. 004684-004686. A Permit Application is attached.
- 32. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Robert J. Touhey, Delaware Department of Natural Resources and Environmental Control, re: Progress reports, 8/8/83. P. 004687-004688.
- 33. Memorandum to Mr. Walter J. Tel, U.S. EPA, from Mr. Stephen R. Wassersug, U.S. EPA, re: Data validation policies and procedures, 8/4/83. P. 004689-004690.
- 34. Memorandum to file from Mr. Howard O. Wilson, U.S. EPA, re: Residential well sampling, 7/20/83. P. 004691-004693.
- 35. Letter to Ms. Christine Altomari, U.S. EPA, from Mr. William J. Tansey, Getty Refining and Marketing, re: Red Lion Creek samples, 5/27/83. P. 004694-004702. The technical data booklet is attached.
- 36. Memorandum to Mr. William J. Tansey, Getty Refining and Marketing Co., from Mr. W.L. Osburn, Delaware Department of Natural Resources and Environmental Control, re: Organic analysis results on Wells 6a and 5a, 11/6/81. P. 004703-004707. The analytical results are attached.
- 37. Letter to Mr. Thomas Eichler, Delaware Department of Natural Resources and Environmental Control, from Mr. Stephen R. Wassersug, U.S. EPA, re: EPA contract for laboratory services, 1/26/83. P. 004708-004708.
- 38. Letter to Mr. Joseph W. Weik from Mr. Michael A. Apgar, Delaware Department of Natural Resources and

- Environmental Control, re: Application to drill a well, 1/10/83. P. 004709-004709.
- 39. Letter to Secretary John E. Wilson, Delaware Department of Natural Resources and Environmental Control, from Mr. Peter N. Bibko, U.S. EPA, re: Negotiations with potentially responsible parties, 10/26/82. P. 004710-004711.
- 40. Letter to Mr. Joseph Weik from Mr. Jed Callen, U.S. EPA, re: Drinking water well construction, 6/10/82. P. 004712-004712.
- 41. Letter to Mr. and Mrs. Jacob Wagner from Mr. Jed Z. Callen, U.S. EPA, re: Drinking water and monitoring well, 6/18/82. P. 004713-004717. A contract is attached.
- 42. Letter to the Honorable Peter Bibco, U.S. EPA, from Mr. David S. Swayze, Prickett, Jones, Elliott, Kristol and Schnee, re: Tybouts Corner Landfill enforcement, 4/5/82. P. 004718-004722.
- 43. Letter to Mr. Thomas Eichler, Delaware Department of Natural Resources and Environmental Control, from Mr. Stephen R. Wassersug, U.S. EPA, re: Getty production well, 3/15/82. P. 004723-004724.
- 44. Memorandum to Mr. Christopher J. Capper, U.S. EPA, from Mr. William N. Hedeman, U.S. EPA, re: Remedial Investigation/Feasibility Study authorization, 11/7/81. P. 004725-004728.
- 45. Memorandum to Chris Capper, U.S. EPA, from Mr. Bill Sullivan, U.S. EPA, re: Enforcement at Tybouts Corner, 2/25/82. P. 004729-004729.
- 46. Letter to Mr. Stephen Wassersug, U.S. EPA, from Mr. John E. Wilson, Delaware Department of Natural Resources and Environmental Control, 8/31/81. P. 004730-004730.
- 47. Letter to Ms. Ruth Ann Gordon, U.S. EPA, from Mr. Michael A. Apgar, Delaware Department of Natural Resources and Environmental Control, re: Sampling data, 3/13/81. P. 004731-004731.

- 48. Form letter from Mr. Scott A. Green, New Castle County Department of Law, re: Alternate water supplies, (undated). P. 004732-004735. An access agreement and an application for service are attached.
- 49. Letter to Mr. Peter Bibko, U.S. EPA, from Mr. John E. Wilson, Delaware Department of Natural Resources and Environmental Control, re: Feasibility Study Agreement, (undated). P. 004736-004791. The agreement is attached.
- 50. Letter to Mr. Richard Ladd, Texaco Refining and Marketing Co., from Mr. Michael A. Apgar, Delaware Department of Natural Resources and Environmental Control, re: Alternative to remedy ground water contamination, 5/15/85. P. 004792-004793.
- 51. Memorandum to Mr. Jed Callen, U.S. EPA, from Ms. Christine Altomari, U.S. EPA, re: Alternate water supply, (undated). P. 004794-004794.

## XIX. QUALITY ASSURANCE PLAN (QA PLAN)

1. Report: <u>Quality Assurance Work Plan for Tybouts Corner Landfill</u>, (undated). P. 004795-004797.

### XX. CORRESPONDENCE FILE/CR PLAN

- 1. Letter to Ms. E. Ann Cardinal, U.S. EPA, from Mr. Gilbert J. Meyer, Jr., and Mr. David E. MacIntyre, NUS Corporation, re: Submittal of Draft Responsiveness Summary, 1/17/86. P. 004798-004798.
- CRI Planning First & Second Quarter FY'85 Region III table, (author unknown), (undated). P. 004799-004799.
- 3. Phone/meeting notes between Mr. Bob Chadwick, U.S. EPA, and Ms. Ann Cardinal, NUS Corporation, re: Development of Site Community Relations Plan, 4/11/85. P. 004800-004800.
- 4. Phone/meeting notes between Mr. Bob Chadwick, U.S. EPA and Ms. Ann Cardinal, NUS Corporation, re: Tybouts meeting, 4/12/85. P. 004801-004801.
- 5. Report: Tybouts Corner Landfill Site, New Castle County, Delaware, Fact Sheet, July 1985, (undated). P. 004802-004806.
- 6. Letter to Ms. E. Ann, U.S. EPA, from Mr. Gilbert J. Meyer, Jr., and Mr. David E. MacIntyre, NUS Corporation, re: Transmittal of fact sheets, 7/18/85. P. 004807-004807.
- 7. Report: A Summary of citizen and Interested-Party
  Comments and Concerns and of U.S. Environmental
  Protection Agency Responses, Tybouts Corner Landfill
  Site, Public Meeting, Tybouts Corner, New Castle
  County, Delaware, July 23, 1985, (undated). P. 004808-004812.
- 8. Report: A Summary of citizen and Interested-Party
  Comments and Concerns and of U.S. Environmental
  Protection Agency Responses, Tybouts Corner Landfill
  Site, Public Meeting, Tybouts Corner, New Castle
  County, Delaware, July 23, 1985, (undated). P. 004813-004817.
- 9. Report: A Summary of citizen and Interested-Party
  Comments and Concerns and of U.S. Environmental
  Protection Agency Responses, Tybouts Corner Landfill
  Site, Public Meeting, Tybouts Corner, New Castle
  County, Delaware, July 23, 1985, (undated).

- P. 004818-004822.
- 10. Report: Meeting Summary, Tybouts Corner Landfill Site, Tybouts Corner, New Castle County, Delaware, July 23, 1986, (undated). P. 004823-004825.
- 11. Letter to Ms. E. Ann Cardinal, U.S. EPA, from Mr. Gilbert J. Meyer, Jr. and Mr. David E. MacIntyre, NUS Corporation, re: Submittal of Responsiveness Summary, 8/16/85. P. 004826-004826.
- 12. Memorandum to distribution from Ms. Carrie Deitzel, NUS Corporation, re: Tybouts Community Relations Plan, 10/30/85. P. 004827-004827.
- 13. Letter to Ms. E. Ann Cardinal, U.S. EPA, from Mr. Gilbert J. Meyer, Jr. and Mr. David E. MacIntyre, NUS Corporation, re: Transmittal of the Draft Community Relations Plan, 11/11/85. P. 004828-004828.
- 14. Report: Meeting Summary, Tybouts Corner Landfill Site, Tybouts Corner, New Castle County, Delaware, December 18, 1985, (undated). P. 004829-004831.
- 15. Report: <u>Tybouts Corner Landfill, Progress and Plans,</u>
  <u>January 1984 Update</u>, (undated). P. 004832-004832.
- 16. Report: <u>Tybouts Corner Landfill, Progress and Plans, February 1984 Update</u>, (undated). P. 004833-004834.
- 17. Report: Tybouts corner Landfill, Progress and Plans, July 1984 Update, (undated). P. 004835-004835.
- 18. Work Assignment Cover Sheet for Contract Number 68-01-6699, 12/31/84. P. 004836-004836.
- 19. Press Release: <u>EPA and the State of Delaware Announce</u> <u>Superfund Financed Studies at Tybouts Corner Landfill</u>, 3/23/83. P. 004837-004838.
- 20. Meeting notes from 3/24/83 Community Meeting, 3/24/83. P. 004839-004840.
- 21. Report: <u>Tybouts Corner Landfill, Progress and Plans, November 1983 Update</u>, (undated). P. 004841-004841.
- 22. Report: Tybouts Corner Landfill, Progress and Plans, August 1983 Update, (undated). P. 004842-004843.

- 23. Report: Tybouts Corner Landfill, Progress and Plans, August/September 1983 Update, (undated). P. 004844-004845.
- 24. Report: Tybouts Corner Landfill, Progress and Plans, December 1983 Update, (undated). P. 004846-004846.
- 25. Report: <u>Statement of Work, Implementation of Community Relations Plans</u>, (undated). P. 004847-004848.
- 26. Report: <u>Statement of Work, Community Relations Plans</u>, (undated). P. 004849-004850.
- 27. Report: <u>Preferred Remedial Alternative for the Tybouts</u>
  <u>Corner Landfill</u>, (undated). P. 004851-004852.
- 28. Report: Appendix B EPA Community Relations Plan for Remedial Action at Tybouts Corner, New Castle County, Delaware, (undated). P. 004853-004858.
- 29. Report: Community Relations Plan for Remedial Action at Tybouts Corner, New Castle County, Delaware, (undated). P. 004859-004862.

### XXI. PUBLIC COMMENT ON WATER LINE

- 1. Letter to Mr. Thomas P. Eichler of U.S. EPA from Mr. Robert J. Touhey of Delaware Department of Natural Resources and Environmental Control, re: Comments and concerns of water supply alternatives. 8/23/84. P. 004863-004865.
- 2. Letter to Mr. Thomas P. Eichler, U.S. EPA, from Mr. Robert J. Touhey, Delaware Department of Natural Resources and Environmental Control, re: Substitution of two pages of 8/23/84 letter, (undated). P. 004866-004868.
- 3. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Wm. Southard Jones, Jr., re: City water hookups, 8/18/84. P. 004869-004869.
- 4. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. and Mrs. Charles B. McCaffery re: Comments on the extension of water lines, 8/18/84. P. 004870-004871.
- 5. Letter to Mr. Roy Schrock, U.S. EPA, from Ms. Rochelle B. Hines, re: Bidding on water cleanup. 8/14/84. P. 004872-004872.
- 6. Newspaper Article <u>Water Woes at an End?</u> The News-Journal papers, 8/6/84. P. 004873-004873.
- 7. Letter to Mr. Schrock from Ms. Judy G. Ikest re: Extension of water services, 8/4/84. P. Petition is attached. P. 004874-004877.
- 8. Letter from Mr. William K. Shaw, Sr. and Ms. Dorothy Faye Shaw re: Extension of water services, 8/15/84. P. 004878-004878.
- 9. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Charles P. Reilly and Ms. Courtney A. Reilly re: Extension of public water services, (undated). P. 004879-004879.
- 10. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Charles A. Fritz and family re: Extension of water services to the expanded area, 8/20/84. P. 004880-004880.

- 11. Letter to Mr. Ray [sic] Schrock, U.S. EPA, from Mr. John R. Brannock re: Connection to city water line, 8/23/84. P. 004881-004881.
- 12. Letter to Mr. Schrock [sic], U.S. EPA, from Mr. and Mrs. Leo J. Woytko and Son re: Alternative water supply. (undated). P. 004882-004882.
- 13. Letter to Mr. Roy Schrock, U.S. EPA, from Ms. Judith N. Knorr, re: Hook-up to city water, 8/23/84. P. 004883-004883.
- 14. Letter from Mr. Leon A. McBride, re: Alternative water, 8/26/84. P. 004884-004884.
- 15. Letter from Honorable K. M. Jester, re: Hook-up to city water, 8/25/84. P. 004885-004886.
- 16. Letter to Mr. Roy Schrock, U.S. EPA, from Ms. Catherine G. Cavender, re: Alternative water supply, 8/21/84. P. 004887-004888.
- 17. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Victor Singer, re: Costs of water supply alternatives, 8/23/84. P. 004889-004890.
- 18. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Jim Sutton, re: Meeting on water supply alternatives, 8/15/84. P. 004891-004891.
- 19. Letter to Mr. Schrock from Mr. and Mrs. Pierce and Rosalie Martin, re: Extension of public water lines, 8/20/84. P. 004892-004892.
- 20. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Leroy M. Webb and Ms. Nannie M. Webb re: Alternative water supply, 8/21/84. P. 004893-004895.
- 21. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. Donald C. Frisco re: Comments on alternative water supplies, 8/18/84. P. 004896-004897.
- 22. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. and Mrs. Robert Baker and family, re: Extension of city water lines, 8/22/84. P. 004898-004898.

- 23. Letter to Mr. Roy Schrock, U.S. EPA, from Ms. Gladys M. Jones re: Water supply alternatives, 8/21/84. P. 004899-004900.
- 24. Letter to Mr. Roy Schrock, U.S. EPA, from Honorable James T. Vaughn, State Senate of Delaware, re: Support for extension of water lines, 8/23/84. P. 004901-004901.
- 25. Letter to Mr. Roy Schrock, U.S. EPA, from Mrs. Wallace D. Neilson re: Extension of water lines, 8/24/84. P. 004902-004903.
- 26. Letter to Mr. Roy Schrock, U.S. EPA, from Ms. Roberta McManus and Mrs. Rhett McManus re: Extension of water lines, 8/22/84. P. 004904-004907.
- 27. Letter to Mr. Roy Schrock, U.S. EPA, from Ms. Sara M. Wagner re: Keeping of her well, 8/21/84. P. 004908-004908.
- 28. Letter to Mr. Roy Schrock, U.S. EPA, from Honorable Richard F. Davis, Delaware House of Representatives re: Support of water line extension, 8/17/84. P. 004909-004911.
- 29. Letter to Mr. Schrock [sic] from Mr. and Mrs. W. C. Neilson re: Hook-up to city water, 8/22/84. P. 004912-004913.
- 30. Letter to Mr. Roy Schrock, U.S. EPA, from Honorable Jeffrey G. Mack, Delaware House of Representatives re: Support of extending water lines, 8/20/84. P. 004914-004916.
- 31. Letter to Mr. Roy Schrock, U.S. EPA, from Honorable Thomas R. Carper, U.S. House of Representatives, re: Support of extending water lines, 8/24/84. P. 004917-004919.
- 32. Letter from Mr. and Mrs. Ken Jones re: Support of extending water lines, (undated). P. 004920-004920.
- 33. Public comments from the public meeting on 8/13/84 at the Gunning Bedford School. P. 004921-004941.
- 34. Envelopes for the letters received regarding the extension of water service. P. 004942-004956.

#### XXII. WATER LEVEL RECORDINGS

- 1. Letter to Mr. Roy Schrock, U.S. EPA, from Mr. George D. Gardner, NUS Corporation, re: Water level recorder charts, 4/23/85. P. 004957-005062. Water level charts and drawdown and recovery readings are attached.
- Tybouts Corner Landfill Water Level Elevations to EPA from Mr. Tim Hill, NUS Corporation, 3/23/84. P. 005063-005119. Water Level Evaluations for 215, 302, 303, 304, 307, 309, 310, 311, 312, 313, 314, 315, MP2, MP#, MP3A, P-5, MP-10; MP11, TY101, TY102, TY103, TY105, TY107, TY108, TY110, TY113, TY114, TY201, TY202, TY203, and TY204-TY214 are attached.

#### XXIII. PRE-RI/FS

- 1. Report: Remedial Action Master Plan and Project Work Statements for Tybouts Corner Landfill, New Castle County, Delaware, prepared by R.E. Wright Associates, Inc., 10/82. P. 005120-005211.
- 2. Report: <u>Hydrogeologic Analysis of the Tybouts Corner Landfill Northern New Castle County, Delaware</u>, prepared by R. E. Wright Associates, Inc., 9/81. P. 005212-005297.
- 3. Report: <u>Continuous Water Level Recorder Sheets</u>, prepared by NUS Corporation, 1983-84. P. 005298-005514.
- 4. Five photographs of Subsurface Investigation Areas, April 27, 1983. P. 005515-005519.
- 5. Tybouts Photographs Project No. 0716.11, Week of January 16, 1984. P. 005520-005540.
- 6. Project Logbook of site visit to Tybouts Corner Landfill, by NUS Corporation, February 17, 1983. P. 005541-005550.
- 7. Chain of Custody Forms, Tybouts Corner Landfill, May 26, 1983 to January 19, 1985. P. 005551-005603.
- 8. Delaware Field Books, Tybouts Corner Landfill, Book No. 1 Book No. 2, 0716.05, May, 1983-January, 1985. P. 005604-005668.
- 9. Sampling and Analysis Graphs and Data, January 29, 1983
   November 16, 1984. P. 005669-005837.
- 10. Traffic Reports by U.S. EPA Hazardous Wate Investigation Sample Management Office, Alexandria, Virginia, January 1983 May, 1984. P. 005838-006648.
- 11. Report: <u>Groundwater Monitoring Point Installation</u>, <u>Tybouts Corner Landfill</u>, by E. H. Richardson Associates, Inc., 3/26/74. P. 006649-007138.
- 12. Newspaper articles. P. 007139-007193.

# XIV. NARRATIVE AND QUALITY CONTROL SUMMARY (CLP - Part 1)

- 1. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead Compu Chem, re: Report of Quality Control Data, 2/27/84. P. 007194-007194.
- 2. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead Compu Chem, re: Report of Data, 2/27/84. P. 007195-007195.
- 3. Narrative, EPA Case No. 2333. P. 007196-007207. The following are attached:
  - a) a cover letter;
  - b) a sample Completion Control Sheet;
  - c) Quality Control Notices;
  - d) a Decision Tree Process.
- 4. Quality Control Summary, EPA Case No. 2333. P. 007208-007246. The following are attached:
  - a) a Surrogate Recovery Summary;
  - b) a Reagent Blank Summary;
  - c) a Matrix Spike Duplicate/Recovery Summary;
  - d) a DLTPP Performance Summary;
  - e) a BLB Performance Summary.

#### XXV. SAMPLE DATA POCKET AND RAW QUALITY CONTROL (CLP - Part 1)

- 1. Sample Data Packet, EPA Case No. 2333. P. 007247-007302. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantifiation report;
  - f) a Pesticide Chromatogram(s)/Quantifiation
     report;
  - g) Work Sheets.
- 2. Sample Data Packet, EPA Case No. 2733, EPA Sample No. R3674, Well-205, Compu Chem No. 3 19546. P. 007303-007427. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantifiation report;
  - f) a Pesticide Chromatogram(s)/Quantifiation
     report;
  - g) Work Sheets.
- 3. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3675, Well TY-205, Compu Chem No. 19547. P. 007428-007535. The following are attached:

- a) the HSL results Organic Analysis Data Sheets;
- b) the Tentatively Identified Compounds list;
- c) a VOA Chromatogram(s)/Quantifiation report;
- d) a Semi-Volatile Chromatogram(s)/
   Quantitation report;
- e) a TCDD Chromatogram(s)/Quantifiation report;
- f) a Pesticide Chromatogram(s)/Quantifiation
   report;
- q) Work Sheets.
- 4. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3676, Well MP-2, Compu Chem No. 19549. P. 007536-007662. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantifiation report;
  - f) a Pesticide Chromatogram(s)/Quantifiation
     report;
  - g) Work Sheets.
- 5. Sample Data Packet, EPA No. 2333, EPA Sample No. 3677, Well TY-105, Compu Chem No. 19550. P. 007663-007761. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation report;

- d) a Semi-Volatile Chromatogram(s)/
   Ouantitation report;
- e) a TCDD Chromatogram(s)/Quantifiation report;
- f) a Pesticide Chromatogram(s)/Quantifiation report;
- g) Work Sheets.
- 6. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3678, Well TY-303, Compu Chem No. 19551. P. 007762-007837. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantifiation report;
  - f) a Pesticide Chromatogram(s)/Quantifiation
     report;
  - g) Work Sheets.
- 7. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3679, Well TY-202, Compu Chem No. 19552. P. 007838-007925. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantifiation report;

- f) a Pesticide Chromatogram(s)/Quantifiation
   report;
- g) Work Sheets.
- 8. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3680, Well TY-206, Compu Chem No. 19553. P. 007926-007975. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantifiation report;
  - f) a Pesticide Chromatogram(s)/Quantifiation
     report;
  - g) Work Sheets.
- 9. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3681, Well TY-203, Compu Chem No. 19554. P. 007976-008057. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantifiation report;
  - f) a Pesticide Chromatogram(s)/Quantifiation report;
  - g) Work Sheets.

- 10. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3682, Well TY-5, Compu Chem No. 19555. P. 008058-008160. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantifiation report;
  - f) a Pesticide Chromatogram(s)/Quantifiation
     report;
  - g) Work Sheets.
- 11) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3683, Well TY-210, Compu Chem No. 19556. P. 008161-008286. The following are attached:
  - a) the HSL results 3 Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantifiation Report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation Report;
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     Report;
  - g) Work Sheets.
- 12. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3684, Well TY-201, Compu Chem No. 19557. P. 008287-008357. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;

- b) the Tentatively Identified Compounds List;
- c) a VOA Chromatogram(s)/Quantitation Report;
- d) a Semi-Volatile Chromatogram(s)/
   Quantitation Report;
- e) a TCDD Chromatogram(s)/Quantitation Report;
- f) a Pesticide Chromatogram(s)/Quantitation
   Report;
- g) Work Sheets.
- 13. (CLP) Standards Packet, EPA Case No. 2333. P. 008358-009027. The following are included:
  - a) a VOA Case Summary Reference Guide;
  - b) a Semi-Volatile Summary Reference Guide;
  - c) a Pesticide Case Summary Reference Guide;
  - d) a TCDD Summary Reference Guide;
  - e) the GC/MS Environment Data (VOA);
  - f) the GC/MS Environment Data (semi-volatiles);
  - g) 4 Detection Limit Studies.
- 14. Raw Quality Control, EPA Case No. 2333. P. 009028-009509. The following are included:
  - a) a DFTPP Reference Table;
  - b) a BFB Reference Table;
  - c) a Chromatography Check Data;
  - d) an Instrument Blank (HSL);
  - e) a Method Blank VOA (HSL);
  - f) a Method Blank Semi-Volatile (HSL);
  - g) a Method Blank Pesticide (HSL);
  - h) a Method Blank TCDD;
  - i) a Matrix Spike VOA (HSL);
  - j) a Duplicate Matrix Spike VOA (HSL);
  - k) a Matrix Spike Semi-Volatile;
  - 1) a Duplicate Matrix Spike Semi-Volatile;
  - m) a Matrix Spike Pesticide;
  - n) a Duplicate Matrix Spike Pesticide;
  - o) a Sample Preparation.

## XXVI.NARRATIVE (CLP - Part 2)

- 1. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead Compu Chem, re: Report of quality control data for Case number 2333, 2/27/84. P. 009510-009511.
- 2. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead Compu Chem, re: Results associated with the analysis of the duplicate matrix spike results for EPA Case Number 2333, 2/27/84.
  P. 009512-009513.
- 3. Narrative, EPA Case No. 2333. P. 009514-009526. The following are included:
  - a) a cover letter;
  - b) a Sample Completion Control Sheet;
  - c) the Quality Control Notices;
  - d) a Decision Tree Process.

# XXVII. <u>OUALITY CONTROL SUMMARY</u> (CLP - Part 2)

- Quality Control Summary, EPA Case No. 2333, P. 009527-009563. The following are attached:
  - a) a Surrogate % Recovery Summary;
  - b) a Reagent Blank Summary;
  - c) a Matrix Spike Duplicate/Recovery Summary;d) a DETPP Performance Summary;

  - e) a BFB Performance Summary.

#### XXVIII.SAMPLE DATA AND STANDARDS PACKETS (CLP - Part 3)

- 1. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3502, Surface Water TY-014, Compu Chem No. 19237. P. 009564-009641. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation Report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) Work Sheets.
- 2. Sample Data Packet, EPA Case No. 2733, EPA Sample No. R3504, Surface Water TY-011, Compu Chem No. 19238.
  P. 009642-009702. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation report;
  - q) work sheets.
- 3. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3505, Surface Water TY-007, Compu Chem No. 19239. P. 009703-009754. The following are included:

- a) the HSL results Organic Analysis Data Sheets;
- b) the Tentatively Identified Compounds list;
- c) a VOA Chromatogram(s)/Quantitation report;
- d) a Semi-Volatile Chromatogram(s)/
   Quantitation report;
- e) a TCDD Chromatogram(s)/Quantitation report;
- f) a Pesticide Chromatogram(s)/Quantitation
   report;
- q) work sheets.
- 4. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3506, Surface Water TY-015, Compu Chem No. 19240. P. 009755-009807. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - q) work sheets.
- 5. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3508, Surface Water TY-006A, Compu Chem No. 19241. P. 009808-009862. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;

- d) a Semi-Volatile Chromatogram(s)/
   Ouantitation report;
- e) a TCDD Chromatogram(s)/Quantitation report;
- f) a Pesticide Chromatogram(s)/Quantitation
   report;
- q) work sheets.
- 6. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3510, Surface Water TY-00A, Compu Chem No. 19236. P. 009863-009911. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation report;
  - g) work sheets.
- 7. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3668, Surface Water TY-005, Compu Chem No. 19242. P. 009912-009961. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;

- f) a Pesticide Chromatogram(s)/Quantitation
   report;
- g) work sheets.
- 8. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3669, Surface Water TY-001, Compu Chem No. 19243. P. 009962-010012. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) work sheets.
- 9. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3670, Surface Water TY-002, Compu Chem No. 19244. P. 010013-010065. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) Work Sheets.

- 10. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3671, Surface Water TY-307, Compu Chem No. 19245. P. 010066-010115. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) Work Sheets.
- 11. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3672, Surface Water TY-309, Compu Chem No. 19247. P. 010116-010261. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) Work Sheets.
- 12. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3695, Surface Water TY-006, Compu Chem No. 19248. P. 010262-010309. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;

- b) the Tentatively Identified Compounds list;
- c) a VOA Chromatogram(s)/Quantitation report;
- d) a Semi-Volatile Chromatogram(s)/
   Quantitation report;
- e) a TCDD Chromatogram(s)/Quantitation report;
- f) a Pesticide Chromatogram(s)/Quantitation report;
- g) Work Sheets.
- 13. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3697, Surface Water TY-012, Compu Chem No. 19249. P. 010310-010365. The following are attached:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation report;
  - g) Work Sheets.
- 14. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3699, Surface Water TY-013, Compu Chem No. 19250. P. 010366-010416. The following are included:
  - a) the HSL results Organic Analysis Data Sheets;
  - b) the Tentatively Identified Compounds list;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;

- e) a TCDD Chromatogram(s)/Quantitation report;
- f) a Pesticide Chromatogram(s)/Quantitation
   report;
- g) Work Sheets.
- 15. Standards Packet, EPA Case No. 2333. P. 010417-011092. The following are included:
  - a) a VOA Case Summary Reference Guide;
  - b) a Semi-Volatile Summary Reference Guide;
  - c) a Pesticide Case Summary Reference Guide;
  - d) a TCDD Summary Reference Guide;
  - e) the GCIMS environment data (VOA);
  - f) the GCIMS environment data (Semi-volatiles);
  - g) a Detection Limit Study.

## XXIX.RAW QUALITY CONTROL DATA (CLP - Part 2)

- 1. Raw Quality Control, EPA Case No. 2333, February 1984. P. 011093-011705. The following are attached:
  - a) a DFTPP Reference Table;
  - b) a BFB Reference Table;
  - c) a Chromatography Check Data;
  - d) an Instrument Blank (HSL);
  - e) a Method Blank VOA (HSL);
  - f) a Method Blank Semi-Volatile (HSL);
  - g) a Method Blank Pesticide (HSL);
  - h) a Method Blank (TCDD);
  - i) a Matrix Spike VOA (HSL);
  - j) a Duplicate Matrix Spike VOA (HSL);
  - k) a Matrix Spike Semi-Volatile;
  - 1) a Duplicate Matrix Spike Semi-Volatile;
  - m) a Matrix Spike Pesticide;
  - n) a Duplicate Matrix Spike Pesticide;
  - o) a Sample Preparation Package.

#### XXX. <u>LETTERS/COVER PAGES</u>

- 1. Letter to Ms. Eileen O'Connor, U.S. EPA, from Mr. Keith A. Hausknecht, Cambridge Analytical Associates, re: Transmittal of Sample Data Package, Case 2427, March 28, 1984. P. 011706-011824. The Sample Data Package is attached.
- Inorganic Analyses Data Package, Case No. 2333, for Sample Numbers MR0464-MR0466, MR0472, MR0475-MR0478, MR0494, MR0495, MR0543-MR0547, MR0458-MR0463, MR0467-MR0471, MR0479 and MR0537-MR0542, 2/27/84. P. 011825-011899.
- 3. Inorganic Analyses Data Package, Case No. 2333, for Sample Numbers MR0430-MR0432, MR0449-MR0457, MR0480, MR0482, MR0485, MR0487-MR0489, MR0492, MR0493, MR0500, MR0481, MR0483, MR0484, MR0486, MR0490, MR0499 and MR1057, 2/15/83. P. 011900-011958.

#### XXXI.NARRATIVE

- 1. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead CompuChem, re: Report of data for EPA Numbers R3630-R3632 and R3664-R3667, 2/24/84. P. 011959-011960.
- 2. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead CompuChem, re: Report of Quality Control Data for EPA Numbers R3630-R3632 and R3664-R3667, 2/24/84. P. 011961-011961.
- 3. Narrative EPA Case No. 2333, (undated). P. 011962-011967. The following are attached:
  - a) a cover letter;
  - b) a Sample Completion Control Sheet;
  - c) the Quality Control Notices;
  - d) a Decision Tree Process.

#### XXXII.QUALITY CONTROL SUMMARY AND SAMPLE DATA PACKET

- 1. Quality Control Summary, EPA Case No. 2333, 2/84. P. 011968-011994. The following are included:
  - a) a Surrogate % Recovery Summary;
  - b) a Reagant Blank Summary;
  - c) a Matrix Spike Duplicate/Recovery Summary;
  - d) a DFTPP Performance Summary;
  - e) a BFB Performance Summary.
- Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3630, Well TY-113, Compu Chem No. 19180, 2/84. P. 011995-012042. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s)/Quantitation Report;
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     Report;
  - g) Work Sheets.
- 3. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3631, Well TY-213, Compu Chem No. 19187R, 2/84. P. 012043-012103. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s);
  - e) a TCDD Chromatogram(s)/Quantitation Report;

- f) a Pesticide Chromatogram(s)/Quantitation
   Report;
- g) Work Sheets.
- 4. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3632, Well TY-207, CompuChem No. 19188, 2/84. P. 012104-012154. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s);
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation Report;
  - q) Work Sheets.
- 5. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3664, Well TY-000, CompuChem No. 19189, 2/84. P. 012155-012208. The following are attached:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s);
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     Report;
  - q) Work Sheets.
- 6. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3665, Well TY-208, CompuChem No. 19190, 2/84. P. 012209-012324. The following are attached:

- a) the HSL Results Organic Analysis Data Sheets;
- b) a Tentatively Identified Compounds List;
- c) a VOA Chromatogram(s)/Quantitation Report;
- d) a Semi-Volatile Chromatogram(s);
- e) a TCDD Chromatogram(s)/Quantitation Report;
- f) a Pesticide Chromatogram(s)/Quantitation
   Report;
- q) Work Sheets.
- 7. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3666, Well TY-107, CompuChem No. 19191, 2/84. P. 012325-012373. The following are attached:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s);
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     Report;
  - g) Work Sheets.
- 8. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3667, Well TY-108, CompuChem No. 19192, 2/84. P. 012374-012424. The following are attached:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitiation Report;
  - d) a Semi-Volatile Chromatogram(s);

- e) a TCDD Chromatogram(s)/Quantitiation Report;
- f) a Pesticide Chromatogram(s)/Quantitiation
   Report;
- g) Work Sheets.

#### XXXIII.STANDARDS PACKET AND RAW QUALITY CONTROL DATA (CLP)

- 1. Standards Packet, EPA Case No. 2333, 2/84. P. 012425-012865. The following are attached:
  - a) a VOA Case Summary Reference Guide;
  - b) a Semi-Volatile Summary Reference Guide;
  - c) a Pesticide Case Summary Reference Guide;
  - d) a TCDD Summary Reference Guide;
  - e) the GCIMS Environment Data (VOA);
  - f) the GCIMS Environment Data (Semi-Volatiles);
  - g) a Detection Limit Study.
- 2. Raw Case Quality Control, EPA Case No. 2333, 2/84. P. 012866-013227. The following are attached:
  - a) a DFTPP Reference Table;
  - b) a BFB Reference Table;
  - c) Chromatography Check Data;
  - d) an Instrument Blank (HSL);
  - e) a Method Blank VOA (HSL);
  - f) a Method Blank Semi-Volatile (HSL);
  - g) a Method Blank Pesticide (HSL);
  - h) a Method Blank TCDD;
  - i) a Matrix Spike VOA (HSL);
  - j) a Duplicate Matrix Spike VOA (HSL);
  - k) a Matrix Spike Semi-Volatile;
  - 1) a Duplicate Matrix Spike Semi-Volatile;
  - m) a Matrix Spike Pesticide;
  - n) a Duplicate Matrix Spike Pesticide;
  - o) a Sample Preparation Package.

#### XXXIV.NARRATIVE

- 1. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead Compu Chem, re: Report of Data for EPA Nos. R3517-R3522, 2/29/84. P. 013228-013229.
- 2. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead Compu Chem, re: Report of Quality Control Data for EPA Case Nos. R3517-R3522, 2/29/84. P. 013230-013230.
- 3. Narrative EPA Case No. 2333, (undated). P. 013231-013246. The following are attached:
  - a) a cover letter;
  - b) a sample Completion Control Sheet;
  - c) the Quality Control Notices;
  - d) a Decision Tree Process.

#### XXXV.QUALITY CONTROL SUMMARY AND SAMPLE DATA PACKET

- 1. Quality Control Summary, EPA Case No. 2333, 2/84. P. 013247-013331. The following are included:
  - a) a Surrogate % Recovery Summary;
  - b) a Reagent Blank Summary;
  - c) a Matrix Spike Duplicate/Recovery Summary;
  - d) a DFTPP Performance Summary;
  - e) a BFB Performance Summary.
- 2. Sample Data Packet, EPA Case No. 2333, Sample No. R3517, CompuChem No. 19558, 2/84. P. 013332-013393. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation Report;
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     Report;
  - g) Work Sheets.
- 3. Sample Data Packet, EPA Case No. 2333, Sample No. R3518, Well TY-311, CompuChem No. 19559, 2/84. P. 013394-013453. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation Report;
  - e) a TCDD Chromatogram(s)/Quantitation Report;

- f) a Pesticide Chromatogram(s)/Quantitation
   Report;
- g) Work Sheets.
- 4. Sample Data Packet, EPA Case No. 2333, Sample No. R3519, Well TY-312, CompuChem No. 19560, 2/84. P. 013454-013548. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation Report;
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation Report;
  - g) Work Sheets.
- 5. Sample Data Packet, EPA Case No. 2333, Sample No. R3520, Well TY-313, CompuChem No. 19561, 2/84. P. 013549-013654. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation Report;
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     Report;
  - g) Work Sheets.

- 6. Sample Data Packet, EPA Case No. 2333, Sample No. R3521, Well TY-314, CompuChem No. 19562, 2/84. P. 013655-013738. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation Report;
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     Report;
  - g) Work Sheets.
- 7. Sample Data Packet, EPA Case No. 2333, Sample No. R3522, Well TY-315, CompuChem No. 19563, 2/84. P. 013739-013794. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation Report;
  - e) a TCDD Chromatogram(s)/Quantitation Report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     Report;
  - g) Work Sheets.

#### XXXVI.STANDARDS PACKET AND RAW QUALITY CONTROL DATA (CLP)

- 1. Standards Packet, EPA Case No. 2333, 2/84. P. 013795-014205. The following are attached:
  - a) a VOA Case Summary Reference Guide;
  - b) a Semi-Volatile Summary Reference Guide;
  - c) a Pesticide Case Summary Reference Guide;
  - d) a TCDD Summary Reference Guide;
  - e) the GC/MS Environment Data (VOA);
  - f) the GC/MS Environment Data (Semi-Volatiles);
  - g) a Detection Limit Study.
- 2. Raw Quality Control Data, EPA Case No. 2333, 2/84. P. 014206-014585. The following are attached:
  - a) a DFTPP Reference Table;
  - b) a BFB Reference Table;
  - c) a Chromatography Check Data;
  - d) an Instrument Blank (HSL);
  - e) a Method Blank VOA (HSL);
  - f) a Method Blank Semi-Volatile (HSL);
  - g) a Method Blank Pesticide (HSL);
  - h) a Method Blank TCDD;
  - i) a Matrix Spike VOA (HSL);
  - j) a Duplicate Matrix Spike VOA (HSL);
  - k) a Matrix Spike Semi-Volatile;
  - 1) a Duplicate Matrix Spike Semi-Volatile;
  - m) a Matrix Spike Pesticide;
  - n) a Duplicate Matrix Spike Pesticide;
  - o) a Sample Preparation Package.

#### XXXVII. LETTERS AND NARRATIVE

- 1. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead CompuChem, re: Report of data for EPA Nos. R3513-R3516, R3687-R3694, R3523, R3685 and R3673, 3/2/84. P. 014586-014588.
- 2. Letter to Mr. Richard Thacker, U.S. EPA, from Mr. Kevin McConnaghy, Mead CompuChem, re: Report of Quality Control Data for EPA Nos. R3513-R3516, R3687-R3694, R3523, R3685 and R3673, 3/2/84. P. 014589-014590.
- 3. Narrative EPA Case No. 2333, (undated). P. 014591-014610. The following are included:
  - a) a cover letter;
  - b) a sample Completion Control Sheet;
  - c) the Quality Control Notices;
  - d) a Decision Tree Process.

#### XXXVIII.QUALITY CONTROL SUMMARY AND SAMPLE DATA PACKET (CLP)

- 1. Quality Control Summary, EPA Case No. 2333, 2/84. P. 014611-014651. The following are included:
  - a) a Surrogate % Recovery Summary;
  - b) a Reagant Blank Summary;
  - c) a Matrix Spike Duplicate/Recovery Summary;
  - d) a DFTPP Performance Summary;
  - e) a BFB Performance Summary.
- 2. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3513, Well TY-311, CompuChem No. 19707, (undated). P. 014652-014733. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) Work Sheets.
- 3. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3514, Well TY-102, CompuChem No. 19706, (undated). P. 014734-014803. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;

- f) a Pesticide Chromatogram(s)/Quantitation
   report;
- g) Work Sheets.
- 4. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3515, Well TY-000A, CompuChem No. 19705, (undated). P. 014804-014861. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) Work Sheets.
- 5. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3516, Ground Water TY-000B, CompuChem No. 19704, (undated). P. 014862-014915. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) Work Sheets.

- 6. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3523, Surface Water, TY-010, CompuChem No. 19722, (undated). P. 014915-014965. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation Report;
  - d) a Semi-Volatile Chromatogram(s)/ Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report:
  - g) Work Sheets.
- 7. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3673, Well TY-304, CompuChem No. 19545, (undated). P. 014966-015052. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation report;
  - g) Work Sheets.
- 8. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3687, Well MP-11, CompuChem No. 19721, (undated). P. 015053-015129. The following are included:

- a) the HSL Results Organic Analysis Data Sheets;
- b) a Tentatively Identified Compounds List;
- c) a VOC Chromatogram(s)/Quantitation report;
- d) a Semi-Volatile Chromatogram(s)/
   Quantitation report;
- e) a TCDD Chromatogram(s)/Quantitation
  report;
- f) a Pesticide Chromatogram(s)/Quantitation report;
- g) Work Sheets.
- 9. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3685, Well TY-212, CompuChem No. 19723, (undated). P. 015130-015200. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation report:
  - d) a Semi-Volatile Chromatogram(s)/ Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report:
  - f) a Pesticide Chromatogram(s)/Quantitation
     report:
  - q) Work Sheets.
- 10. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3688, Well TY-112, CompuChem No. 19720, 2/84. P. 015201-015257. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;

- c) a VOC Chromatogram(s)/Quantitation
  report;
- d) a Semi-Volatile Chromatogram(s)/
   Quantitation report;
- e) a TCDD Chromatogram(s)/Quantitation report;
- f) a Pesticide Chromatogram(s) Quantitation report;
- q) Work Sheets.
- 11. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3689, Well TY-315, CompuChem No. 19719, 2/84. P. 015258-015369. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s) Quantitation report;
  - g) Work Sheets.
- 12. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3690, Well TY-211, CompuChem No. 19718, 2/84. P. 015370-015435. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;

- e) a TCDD Chromatogram(s)/Quantitation report;
- f) Work Sheets.
- 13. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3691, Well TY-101, CompuChem 19717, 2/84. P. 015436-015497. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) Work Sheets.
- 14. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3692, Well TY-110, CompuChem No. 19710, 2/84. P. 015498-015551. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) Work Sheets.
- 15. Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3693, TY-103A, CompuChem No. 19709, 2/84. P. 015552-015605. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report:

- e) a TCDD Chromatogram(s)/Quantitation report;
- f) Work Sheet.
- 16) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3694, Well TY-103, CompuChem No. 19708, 2/84. P. 015606-015666. The following are included:
  - a) the HSL Results Organic Analysis Data Sheets;
  - b) a Tentatively Identified Compounds List;
  - c) a VOC Chromatogram(s)/Quantitation report:
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) Work Sheets.

### XXXIX.(CLP) STANDARDS PACKET AND RAW OC

- 1) Standards Packet, EPA Case No. 2333, 2/84. P. 015667-016543. The following are included:
  - a) a VOA Case Summary Reference Guide;
  - b) a Semi-Volatile Summary Reference Guide;
  - c) a Pesticide Case Summary Reference Guide;
  - d) a TCDD Summary Reference Guide;
  - e) the GC/MS Environment Data (VOA);
  - f) the GC/MS Environment Data (Semi-Volatiles);
  - g) the Detection Limits.
- 2) Raw QC, EPA Case No. 2333, 2/84. P. 016544-017244. The following are included:
  - a) a DFTPP Reference Table;
  - b) a BFB Reference Table;
  - c) a Chromatography Check Data;
  - d) an Instrument Blank (HSL);
  - e) a Method Blank VOA (HSL);
  - f) a Method Blank Semi-Volatile (HSL);
  - g) a Method Blank Pesticide (HSL);
  - h) a Method Blank TCDD;
  - i) a Matrix Spike VOA (HSL);
  - j) a Duplicate Matrix Spike VOA (HSL);
  - k) a Matrix Spike Semi-Volatile;
  - 1) a Duplicate Matrix Spike Semi-Volatile;
  - m) a Matrix Spike Pesticide;
  - n) a Duplicate Matrix Spike Pesticide;
  - o) a Sample Preparation Package.

#### XL. LETTER AND QUALITY CONTROL DATA

- 1) Letter to Mr. Richard Thacker, U.S. EPA, from Ms. Rebecca J. Siebert, Mead CompuChem, re: Report of Quality Control Data for EPA Case Number 1764, EPA Numbers R2119 and R2118, 6/30/83. P. 017245-017247.
- 2) Letter to Mr. Richard Thacker, U.S. EPA, from Ms. Rebecca J. Siebert, Mead CompuChem, re: Report of Data for EPA Case Number 1764, EPA Numbers R2118 and R2119, 6/30/83. P. 017248-017248.
- 3) Sample No. R2113 Data, Quality Control Data, 6/1/83. P. 017249-017293.
- 4) Sample No. R2114 Data, Quality Control Data, 6/83. P. 017294-017341.
- 5) Sample No. R2115 Data, Quality Control Data, 6/83. P. 017342-017390.
- 6) Sample No. R2116 Data, Quality Control Data, 6/83. P. 017391-017450.
- 7) Sample No. R2117 Data, Quality Control Data, 6/83. P. 017451-017500.
- 8) Sample No. R2118 Data, Quality Control Data, 6/83. P. 017501-017538.
- 9) Sample No. R2119 Data, Quality Control Data, 6/83. P. 017539-017645.
- 10) Sample No. 3202 Data, Quality Control Data, 6/83. P. 017646-017735.
- 11) Sample No. 3204R Data, Quality Control Data, 6/83. P. 017736-017794.
- 12) Sample No. 3206R Data, Quality Control Data, 6/83.
  P. 017795-017936.
- 13) Sample No. R2127 Data, Quality Control Data, (undated). P. 017937-018030.
- 14) Lab Sample ID. No. 1469 Data, Quality Control Data, 5/83. P. 018031-018116.

- 15) Sample No. 2128 Data, Quality Control Data, 5/83. P. 018117-018204.
- 16) Sample No. R2129 Data, Quality Control Data, 5/83. P. 018205-018292.
- 17) Sample No. R2130 Data, Quality Control Data, 5/83. P. 018293-018380.
- 18) Sample No. R2131 Data, Quality Control Data, 5/83. P. 018381-018466.
- 19) Sample No. R2132 Data, Quality Control Data, 5/83. P. 018467-018565.
- 20) Sample No. R2133 Data, Quality Control Data, 5/83. P. 018566-018658.
- 21) Sample No. R2134 Data, Quality Control Data, 5/83. P. 018659-018745.
- 22) Sample No. R2135 Data, Quality Control Data, 5/83.
  P. 018746-018837.
- 23) Sample No. R2136 Data, Quality Control Data, 5/83. P. 018838-018957.
- 24) Sample No. R2137 Data, Quality Control Data, 5/83. P. 018958-018990.
- 25) Sample No. R2138 Data, Quality Control Data, 5/83.
  P. 018991-019081.
- 26) Sample No. R2139 Data, Quality Control Data, 5/83. P. 019082-019168.
- 27) Sample No. R2140 Data, Quality Control Data, 5/83. P. 019169-019257.
- 28) Sample No. R2141 Data, Quality Control Data, 5/83. P. 019258-019350.
- 29) Sample No. 2142 Data, Quality Control Data, 5/83. P. 019351-019438.
- 30) Sample No. 2143 Data, Quality Control Data, 5/83. P. 019439-019531.

- 31) Sample No. 2144 Data, Quality Control Data, 5/83. P. 019532-019565.
- 32) Sample No. 2145 Data, Quality Control Data, 5/83. P. 019566-019654.
- 33) Sample No. 1471 Data, Quality Control Data, 5/83. P. 019655-019739.
- 34) Lab Sample ID No. 1473 Data, Quality Control Data, 5/83. P. 019740-019814.

### XLI. TECHNICAL REPORTS

- 1) Report: <u>Technical Report for Viar & Company, U.S. EPA Contract Laboratory Program, Volume II of V</u>, prepared by Environmental Testing and Certification Corporation (ETC Corp.), 6/14/84. P. 019815-020231.
- 2) Report: <u>Technical Report for Viar & Company, U.S. EPA Contract Laboratory Program, Volume III of V</u>, prepared by ETC Corp., 6/14/84. P. 020232-020617. Pages 020616-020617 are blank.
- 3) Report: <u>Technical Report for Viar & Company, U.S. EPA Contract Laboratory Program, Volume IV of V</u>, prepared by ETC Corp., 6/14/84. P. 020681-020931. Pages 020930-020931 are blank.
- 4) Report: Technical Report for Viar 7 Company, U.S. EPA Contract Laboratory Program, Volume V of V, prepared by ETC Corp., 6/14/84. P. 020932-021076. Pages 021075-021076 are blank.

### XLII. INORGANICS QUALITY ASSURANCE

- 1) Inorganics Quality Assurance Data, Case 1687/SAS 509R, 5/83. P. 021077-021172.
- 2) Letter to Mr. Roch Mongeon, U.S. EPA, from Mr. Bill Nivens, Versar Inc., re: Correct original submittal of Case 841C as Case 960R, 3/7/84. P. 021173-021248. Inorganics Analysis Data Sheets for Case 960R are attached.
- 3) Inorganics Quality Assurance Data Case 1764/SAS 568R for Sample Numbers MR0020-MR0025 and MR0101, (undated). P. 021249-021293. There is a transmittal letter on P. 021252.
- 4) Inorganic Analyses Data Package Case 2460/SAS 1065C for Sample Numbers MR2216-MR2236, 5/84. P. 021294-021383.
- 5) Inorganic Analyses Data Package Case 2640/1065C for Sample Numbers MR2201-MR2215, 5/84. P. 021384-021457.
- 6) Inorganic Analyses Data Package Case 2640/SAS 1065C for Sample Numbers MR2256-MR2272, 6/84. P. 021458-021545.
- 7) Inorganic Analyses Data Package Case 2640/SAS 1065C for Sample Numbers MR2251-MR2255, 6/84. P. 021546-021616.
- 8) Inorganic Analyses Data Package Case 2640/SAS 1065C for Sample Numbers MR237-MR2250, 5/84. P. 021617-021692.

## XLIII. TECHNICAL REPORTS

- 1) Report: <u>Technical Report for Viar & Company, U.S. EPA Contract Laboratory Program, Volume I of II</u>, prepared by Environmental Testing and Certification Corporation, 8/21/84. P. 021693-022120. Pages 022119-022120 are blank.
- 2) Report: <u>Technical Report for Viar & Company, U.S. EPA</u>
  <u>Contract Laboratory Program, Volume II of II</u>, (no author cited), 8/21/84. P. 022121-022362.

### XLIV.ORGANIC SAMPLE NOS. C9401-C9410 RESIDENTIAL WELLS

- 1) Letter to Mr. Russel Sloboda, NUS Corporation, from Mr. William H. Vick, re: SAI's Data Report for SMO Case 2640, 6/20/84. P. 022363-022982. Volume I Data Report is attached.
- 2) Organic Sample No. C9411-C9416, Data Report SMO Case 2640, Volume II, (undated). P. 022983-023357.
- 3) Organic Sample No. C9451-C9461, Residential Wells, Volume II, (undated). P. 023358-023722. Pages 023721-023722 are blank.
- 4) Organic Sample No. C9462-C9470, Residential Well Samples, Data Report for SMO Case 2640, Volume IV, (undated). P. 023723-024163.
- 5) Organic Sample, Residential Wells, Volume V, (undated). P. 024164-024509.
- 6) Organic Sample No. C9401-C9410, Residential Wells, Volume VI, (undated). P. 024510-024691.
- 7) Letter to Mr. Richard Thacker, NUS Corporation, from Mr. Kevin McConnaghy, Mead CompuChem, re: Report of Quality Control Data, 2/24/84. P. 024692-024693.

## XLV. NARRATIVE AND QUALITY CONTROL SUMMARY

- 1) Narrative, SVA Case No. 2333, (undated). P. 024694-024709. The following are attached:
  - a) a cover letter;
  - b) a sample completion control sheet;
  - c) a decision tree process.
- 2) Quality Control Summary, SVA Case No. 2333, (undated). P. 024710-024737.
  - a) a Surrogate % Recovery Summary;
  - b) a Reagent Blank Summary;
  - c) a Matrix Spike Duplicate/Recovery Summary;
  - d) a DFTPP Performance Summary:
  - e) a BFB Performance Summary.

### XLVI.SAMPLE DATA PACKAGES AND QUALITY CONTROL SUMMARY

- 1) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3503, CompuChem No. 19264, (undated). P. 024738-024842. The following are included:
  - a) the HSL Results;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/ Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) a Work Sheet.
  - 2) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3507, CompuChem No. 19265, (undated). P. 024843-024930. The following are included:
    - a) the HSL Results;
    - b) a Tentatively Identified Compounds List;
    - c) a VOA Chromatogram(s)/Quantitation report;
    - d) a Semi-Volatile Chromatogram(s)/
       Quantitation report;
    - e) a TCDD Chromatogram(s)/Quantitation report;
    - f) a Pesticide Chromatogram(s)/Quantitation
       report;
    - g) a Work Sheet.
  - 3) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3509, CompuChem No. 19266, (undated). P. 024931-024986. The following are included:
    - a) the HSL Results;

- b) a Tentatively Identified Compounds List;
- c) a VOA Chromatogram(s)/Quantitation report;
- d) a Semi-Volatile Chromatogram(s)/
   Quantitation report;
- e) a TCDD Chromatogram(s)/Quantitation report;
- f) a Pesticide Chromatogram(s)/Quantitation report;
- g) a Work Sheet.
- A) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3511, CompuChem No. 19267, (undated). P. 024987-025045. The following are included:
  - a) the HSL Results;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) a Work Sheet.
- 5) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3696, CompuChem No. 19268, (undated). P. 025046-025099. The following are included:
  - a) the HSL Results;
  - b) a Tentatively Identified Compounds List;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;

- f) a Pesticide Chromatogram(s)/Quantitation
   report;
- g) a Work Sheet.
- 6) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3698, CompuChem No. 19269, (undated). P. 025100-025154. The following are attached:
  - a) the HSL Results;
  - b) a Tentatively Identified Compounds Lists;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) a Work Sheet.
- 7) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3700, CompuChem No. 19270, (undated). P. 025155-025212. The following are included:
  - a) the HSL Results;
  - b) a Tentatively Identified Compounds Lists;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - q) a Work Sheet.
- 8) Standards Packet, EPA Case No. 2333, (undated).

- P. 025213-025668. The following are included:
  - a) a VOC Case Summary Reference Guide;
  - b) a Semi-Volatile Summary Reference Guide;
  - c) a Pesticide Case Summary Reference Guide;
  - d) a TCDD Summary Reference Guide;
  - e) the GC/MS Environment Data (VOA);
  - f) a Detection Limit Study.
- 9) Sample Data Packet, EPA Case No. 2333, EPA Sample No. R3501, CompuChem No. 19257, (undated). P. 025669-025738. The following are included:
  - a) the HSL Results;
  - b) a Tentatively Identified Compounds Lists;
  - c) a VOA Chromatogram(s)/Quantitation report;
  - d) a Semi-Volatile Chromatogram(s)/
     Quantitation report;
  - e) a TCDD Chromatogram(s)/Quantitation report;
  - f) a Pesticide Chromatogram(s)/Quantitation
     report;
  - g) a Work Sheet.
- 10) Raw Quality Control, EPA Case No. 2333, (undated). P. 025739-026133. The following are included:
  - a) a DFTPP Reference table;
  - b) a BFB Reference table;
  - c) a Chromatography Check Data;
  - d) an Instrument Blank (HSL);
  - e) a Method Blank VOA (HSL);
  - f) a Method Blank Semi-Volatile (HSL);
  - g) a Method Blank Pesticide (HSL);
  - h) a Method Blank TCDD;
  - i) a Matrix Spike VOA (HSL);
  - j) a Duplicate Matrix Spike VOA (HSL);
  - k) a Matrix Spike Semi-Volatile;
  - 1) a Duplicate Matrix Spike Semi-Volatile;
  - m) a Matrix Spike Pesticide;
  - n) a Duplicate Matrix Spike Pesticide;
  - o) a Sample Preparation Package.

- 11) Letter to Mr. Bill Eckel, Viar and Company, from Mr. Scott Powers, Versar, Inc., re: Data Package for Case 2427, 4/27/84. P. 026135-026137.
- 12) Letter to Ms. Joan Fisk, U.S. EPA, from Mr. Scott Powers, Verser, Inc., re: Data audit draft report for Case 2427, 4/16/84. P. 026138-26166.
- 13) Quality Control Summary for Sample Nos. R3545-R3567, (undated). P. 026167-026624.
- 14) Quality Control Summary for Sample Nos. R3568-R3573, (undated). P. 026625-027010.
- 15) Quality Control Summary for Sample Nos. R3574-R3580, (undated). P. 027011-027167.
- 16) Standards Packet, (undated). P. 027168-027472.
- 17) Raw Quality Control Sample Control Screens, (undated). P. 027473-027675.

# XLVII. TYBOUT CHRONOLOGICAL FILE, VOLUME I, 1968 TO JULY 15, 1971, BACKGROUND DOCUMENTS - 1968 TO 1979

- 1) Letter to Mr. William Conner, New Castle County Council, from Dr. Floyd I. Hudson, re: County refuse disposal site, 9/10/68. P. 027676-027676.
- 2) Letter to Mr. Robert Westerman, Delaware Board of Health, from Mr. George W. Dutcher, Delaware Department of Public Works, re: Rodent control program, 1/7/68. P. 027677-027677.
- 3) Memorandum from Mr. William Poole, re: J. T. Ward and Son Contractors, Inc. 9/17/68. P. 027678-027678.
- 4) Memorandum to Mr. William Poole from Mr. Michael D. Goldman, re: Condemnation for garbage disposal, 9/17/68. P. 027679-027679.
- 5) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. Robert R. Westerman re: Solid waste disposal site approval, 10/1/68.
  P. 027680-027681.
- 6) Memorandum for the Record, re: Proposed solid waste disposal sites for New Castle County, 10/68.
  P. 027682-027682.
- 7) Letter to Mr. Karins, County Engineers Office, from Mr. William Poole, re: William C. Ward-J.T. Ward and Sons Contractor, Inc., 10/17/68. P. 027683-027684.
- 8) List of landfill receipts 1960-1966, (undated). P. 027685-027685.
- 9) List of landfill receipts 1967-68, (undated). P. 027686-027686.
- 10) List of landfill receipts 1969-73, (undated). P. 027687-027687.
- 11) Letter to Department of Development and Licensing, from Mr. Donald K. Harmeson, Delaware State Board of Health, re: Solid waste disposal site "short period" county landfill certificate of approval, 1968, #1, 10/21/68. P. 027688-027688.

- 12) Letter to Mr. R. R. Westerman, State Board of Health, from Mr. George W. Dutcher, Department of Public Works, re: Plans for the landfill, 10/23/68. P. 027689-027689.
- 13) Letter to Department of Development and Licensing, from Mr. Donald K. Harmeson, Delaware State Board of Health, re: Solid waste disposal site New Castle County Landfill, Tybouts Corner Area), Certificate of Approval, 1968, #2, 10/28/68. P. 027690-027691.
- 14) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. Robert R. Westerman, DE State Board of Health, re: Weight/volume relationship for solid wastes, 11/8/68. P. 027692-027692.
- 15) Letter to Mr. George Dutcher, Department of Public Works, from Mr. John C. Bryson, Delaware Water and Air Resources Commission, re: Certificate of approval, 10/31/68. P. 027693-027694.
- 16) Memorandum to Solid Waste File, re: Proposed sanitary landfill, 11/8/68. P. 027695-027696.
- 17) Memorandum to Solid Waste File, re: Proposed landfill, 11/11/68. P. 027697-027697.
- 18) Letter to Mr. James Wilburn, Air Pollution Control Division, from Mr. George W. Dutcher, Department of Public Works, re: Plans for proposed landfill, 11/14/68. P. 027698-027698.
- 19) Letter to Mr. Robert R. Westerman, DE State Board of Health, from Mr. G.W. Dutcher, Department of Public Works, re: New Castle County sanitary landfill, 11/15/68. P. 027699-027700.
- 20) Letter to Mr. R.R. Westerman, DE State Board of Health, from Mr. George W. Dutcher, Department of Public Works, re: Copies of documents sent to Mr. Wilburn, 11/20/68. P. 027701-027701.
- 21) Letter to Mr. James Wilburn, Air Pollution Control Division, from Mr. George W. Dutcher, Department of Public Works, re: Permission to operate a landfill, 11/20/68. P. 027702-027703.

- 22) Letter to Mr. Uldis Karins, New Castle County
  Engineering Department, from Mr. Clarence D. Turner,
  Subsurface Engineering, Inc., re: Soil laboratory
  work, 11/18/68. P. 022704-027708. The lab work report
  is attached.
- 23) Observations on Tybouts Corner Landfill, 11/25/68. P. 027709-027709.
- 24) Recommendations and conclusions on Tybouts Corner Landfill, prepared by Mr. John M. Karanik, (undated). P. 027710-027711.
- 25) Observations on Tybouts Corner Landfill, 11/25/68. P. 027712-027712.
- 26) Recommendations and conclusions on Tybouts Corner Landfill, prepared by Mr. John M. Karanik, (undated). P. 027713-027714.
- 27) Statement of Mr. Richard W. Ladd on behalf of Getty Oil Company before the Delaware Water and Air Resources Commission on the proposed New Castle County Sanitary Landfill at Red Lion, Delaware, 11/25/68. P. 027715-027717.
- 28) Memorandum to solid waste file, re: Tybouts Corner proposed landfill, 12/3/68. P. 027718-027718.
- 29) Letter to Mrs. Emily H. Womack, Office of the Governor, from Dr. Floyd I. Hudson, re: Llangollen dump, 12/6/68. P. 027719-027719.
- 30) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. John C. Bryson, Delaware Water and Air Resources Commission, re: Permission for operation of a sanitary landfill, 12/9/68.
  P. 027720-027724. An appendix listing supporting documents is attached.
- 31) A resolution to authorize and approve a lease agreement relating to the receipt, compaction and covering of garbage and rubbish at a sanitary landfill near Tybouts Corner and establishing said leased area as a sanitary landfill, 12/9/68. P. 027725-027726. An amendment is attached.

- 32) Memorandum to Solid Waste File from Mr. Robert R. Westerman, DE State Board of Health, re: Water pollution, 12/11/68. P. 027727-027727.
- 33) Mr. Richard Weldon's questions at 12/12/68 Board of Health meeting, (undated). P. 027728-027730.
- 34) Lease Agreement between New Castle and Land Redevelopment Company, 12/16/68. P. 027731-027747.
- 35) Letter to Department of Public Works, from Mr. Donald K. Harmeson, Delaware State Board of Health, re: Certificate of approval, 1968, #3, 12/23/68.
  P. 027748-027750.
- 36) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. John C. Pryson, Delaware Water and Air Resources Commission, re: Certificate of approval APC-68/105, 12/9/68. P. 027751-027755. An appendix listing supporting documents is attached.
- 37) Letter to Mr. William C. Ward, J.T. Ward and Son, from Mr. George W. Dutcher, Department of Public Works, re: Certificate of approval, 12/26/68.
  P. 027756-027756.
- 38) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. George W. Dutcher, Department of Public Works, re: Contract for operation of a landfill, 12/30/68. P. 027757-027757.
- 39) Notice to all using the Black Cat Landfill, New Castle County, from Mr. G.W. Dutcher, Department of Public Works, re: Opening of Tybouts Landfill on January 2, 1969, (undated). P. 027758-027758.
- 40) Letter to Mr. George Dutcher, Department of Public Works, from Mr. Robert R. Westerman, DE State Board of Health, re: Solid waste disposal code, 1/9/69. P. 027759-027759.
- 41) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. Robert R. Westerman, DE State Board of Health, re: Securing federal funds for water sampling, 1/14/69. P. 027760-027760.

- 42) Letter to Mr. William J. Conner, from Mr. William Poole, re: William C. Ward Land Development Company, 1/15/69. P. 027761-027763.
- 43) Letter to Mr. James Wilburn, Delaware Water and Air Resources Commission, and Mr. Robert Westerman, DE State Board of Health, from Mr. George W. Dutcher, Department of Public Works, re: Draft of contract between University of Delaware and the county for testing program, 1/20/69. P. 027764-027764.
- 44) Certificate of Insurance, 1/20/69. P. 027765-027765.
- 45) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. Robert R. Westerman, DE State Board of Health, re: Solid waste disposal code, 1/21/69. P. 027766-027766.
- 46) Letter to Mr. William C. Ward, J.T. Ward and Son Contractors, Inc., from Mr. William Poole, re: Land Redevelopment Company, 1/21/69. P. 027767-027768.
- 47) Letter to Mr. Uldis Karins, Department of Public Works, from Mr. John M. Karanik, Water and Air Resources Commission, re: Contract draft between the University of Delaware and the county, 1/21/69. P. 027769-027770.
- 48) Letter to Mr. Uldis Karins, Department of Public Works, from Mr. John M. Karanik, Water and Air Resources Commission, re: Contract draft between the University of Delaware and the county, 1/23/69. P. 027771-027772.
- 49) Letter to Mr. William C. Ward, from Mr. William Poole, re: Land Redevelopment Company, 1/28/69. P. 027773-027774.
- 50) Letter to State Board of Health, from Mr. Richard B. Weldon, Red Lion Community Association, re: Unsanitary condition at the county landfill, 2/5/69. P. 027775-027775.
- 51) Letter to Mr. Richard B. Weldon, Red Lion Community Association, from Mr. Donald K. Harmeson, DE State Board of Health, re: Reply to February 2, 1969 letter, 2/7/69. P. 027776-027776.

- 52) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. George W. Dutcher, Department of Public Works, re: Review of contract to operate the county landfill, 2/10/69. P. 027777-027779.
- 53) Letter to Mr. Robert Westerman, DE State Board of Health, from Mr. Richard B. Weldon, Red Lion Community Association, Inc., re: Inadequate cover on landfill deposits, 2/25/69. P. 027780-027780.
- 54) Letter to Mr. Robert Westerman, State Board of Health, from Mr. Richard B. Weldon Sr., Red Lion Community Association, re: Fire at Red Lion dump, 3/18/69. P. 027781-027782.
- 55) Letter to Mr. Richard B. Weldon Sr., Red Lion Community Association, from Mr. Robert R. Westerman, DE State Board of Health, re: Reply to March 8, 1969 letter, 3/20/69. P. 027783-027784.
- 56) Letter to Mr. William C. Ward from Mr. Robert R. Westerman, DE State Board of Health, re: State Board of Health inspection, 3/20/69. P. 027785-027786.
- 57) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. Robert R. Westerman, DE State Board of Health, re: Landfill inspection, 3/21/69. P. 027787-027787.
- 59) Letter to Mr. Robert R. Westerman, DE State Board of Health, from Mr. G.W. Dutcher, Department of Public Works, re: Fire at Red Lion dump, 3/21/69. P. 027788-027789.
- 60) Letter to Mr. Wiliam Ward, J.T. Ward and Sons, from Mr. Robert R. Westerman, DE State Board of Health, re: Retransmittal of a letter, 3/26/69. P. 027790-027790.
- 61) Letter to Mr. J. Karanik, Water and Air Resources Commission, from Mr. George W. Dutcher, Department of Public Works, re: Request for approval to establish a depository for old tires, 4/2/69.
  P. 027791-027791.

- 62) Letter to Department of Public Works, from Mr. Donald K. Harmeson, DE State Board of Health, re: Approval to dispose of old tires, 4/3/69. P. 027792-027792.
- 63) Letter to Mr. Robert R. Westerman, DE State Board of Health, from Mr. George W. Dutcher, Department of Public Works, re: First quarterly report for Tybouts Corner Landfill, 4/18/69. P. 027793-027793. A copy of the letter is attached.
- 64) Weekly well data, Tybouts Corner Landfill, 7/24/69-3/15/76. P. 027795-027824.
- 65) Letter to Mr. Uldis Karins, from Mr. Robert D. Varrin, University of Delaware, re: Weekly data, 4/29/69. P. 027825-027825.
- 66) Letter to Mr. Frank Caldwell, from Mr. Robert R. Westerman, DE State Board of Health, re: Introduction of rats to the landfill via refuse collection truck, 6/5/69. P. 027826-027826.
- 67) Letter to Mr. William C. Ward, from Mr. William Poole, re: Land Redevelopment Company, 6/10/69. P. 027827-027827.
- 68) Letter to Mr. Uldis Karins, New Castle County, from Mr. S.K. Banerji, University of Delaware, re: Records of water quality investigations from March 14 May 2, 1969, 6/16/69. P. 027828-027828.
- 69) Memorandum of meeting between Mr. William C. Ward and Mr. Herbert Rowland, re: Contract items between New Castle County and Land Redevelopment Company, 6/18/69. P. 027829-027833.
- 70) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. G.W. Dutcher, Department of Public Works, re: Tybouts Landfill entrance road, 7/9/69. P. 027834-027834.
- 71) Letter to Dr. Floyd I. Hudson, State Board of Health, from Mr. George W. Dutcher, Department of Public Works, re: Request extension of certificate of approval, 1968, #3, 8/7/69. P. 027835-027835.

- 72) Report: <u>Progress Report of the Water Quality</u>
  <u>Investigations at the Tybouts Corner Sanitary Landfill</u>,
  University of Delaware, 8/69. P. 027836-027848.
- 73) Letter to New Castle County Council from Mr. Donald K. Harmeson, State Board of Health, re: Solid waste disposal site certificate of approval, 1969, #4, 9/16/69. P. 027849-027850.
- 74) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. Hugh J. Menghi, Delaware Water and Air Resources Commission, re: Plan of operations and certificate of approval, 9/30/69.
  P. 027851-027851.
- 75) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. G.W. Dutcher, Department of Public Works, re: Plan of operation, 10/3/69. P. 027852-027852.
- 76) Letter to all trash collectors, from Mr. George Dutcher, Department of Public Works, re: Schedule of landfill operations, 10/8/69. P. 027853-027853.
- 77) Memorandum to solid waste file, from Mr. Frederic L. Stiegler Jr., re: Visits to Tybout's Landfill, 10/9/69. P. 027854-027854.
- 78) Memorandum to Solid Waste File, from Mr. E. L. Steigler Jr., re: Odor control at Tybout's Landfill, 10/10/69. P. 027855-027855.
- 79) Letter to Trash Collectors, from Mr. George W. Dutcher, Department of Public Works, re: Schedule of landfill operations, 10/20/69. P. 027856-027856.
- 80) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. G.W. Dutcher, Department of Public Works, re: Letter of October 10, 1969 regarding wind fencing, 10/22/69. P. 027858-027858.
- 81) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. John C. Bryson, Delaware Water and Air Resources Commission, re: Certificate of approval: APC-70/66, 10/27/69. P. 027858-027859.
- 82) Letter to Mr. William C. Ward, from Mr. William Poole, re: Landfill contract, 10/28/69. P. 027860-027868.

- 83) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. George W. Dutcher, re: Employee insurance coverage, 10/31/69. P. 027869-027870. A memo is attached.
- 84) Letter to Mr. William Poole, Potter, Anderson and Carroon, from Mr. George H. Brittingham, J.T. Ward and Son Contractors, Inc., re: Employee vehicle operation, 11/11/69. P. 027871-027871.
- 85) Memorandum of conference with Mr. William Conner, from Mr. William Poole, re: Land redevelopment contract, 11/24/69. P. 027872-027876.
- 86) Letter to Mr. William Ward, from Mr. William Poole, re: Memo of conference with Mr. Bill Conner, 11/25/69. P. 027877-027877.
- 87) Memorandum to Mr. Uldis Karins, from Mr. Nicholas Cofrancesco, re: Employee landfill work rate, 12/29/69. P. 027878-027878.
- 88) Letter to Mr. William J. Conner, from Mr. John I. Cahalan, Department of Public Works, re: Mr. Poole's comments on Land Redevelopment contract, 12/18/69. P. 027879-027879.
- 89) Memorandum to Solid Waste File, re: Monthly summary, (undated). P. 027880-027880.
- 90) Delivery Invoice to New Castle County Engineer's Office, from Mr. William E. Williams, 12/1/69. P. 027881-027881.
- 91) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. G.W. Dutcher, Department of Public Works, re: Daily operations and upkeep of landfill, 1/2/70. P. 027882-027882.
- 92) Letter to Mr. Uldis Karins, from Mr. Shankha K. Banerji, University of Delaware, re: Water quality data, 1/9/70. P. 027883-027883.
- 93) Memorandum to Mr. William J. Conner, from Mr. Joseph F. Toner, New Castle County Council, re: Comments on landfill operations, 1/12/70. P. 027884-027886.

- 94) Memorandum to Mr. G.W. Dutcher, from Mr. Uldis Karins, re: Meeting with Mr. William Ward concerning landfill operations, 1/15/70. P. 027887-027888.
- 95) Letter to Mr. Uldis Karins, from Mr. Shankha Banerji, University of Delaware, re: Bacterial quality of residential water supplies, 1/16/70.
  P. 027889-027889.
- 96) Memorandum to Mr. William J. Conner, from Mr. George W. Dutcher, Department of Public Works, re: Operation of current landfill contract, 1/20/70.
  P. 027890-027898.
- 97) Letter to Mr. Joseph F. Toner, from Mr. William J. Conner, re: Response to memo of 1/12/70 concerning landfill operations, 1/27/70. P. 027899-027900.
- 98) Letter to Mr. Donald K. Harmeson, State Board of Health, from Mr. G.W. Dutcher, Department of Public Works, re: University of Delaware water well reports, 1/29/70. P. 027901-027901.
- 99) Letter to Mr. Uldis Karins, from Mr. S.K. Banerji, University of Delaware, re: Water quality changes from July 1969 to December 1969, 3/16/70.
  P. 027902-027902.
- 100) Letter to Mr. Uldis Karins, from Mr. Shankha K. Banerji, University of Delaware, re: Ground water quality data to 2/27/70, 3/31/70. P. 027903-027904.
- 101) Letter to Mr. Donald K. Harmeson, State Board of Health, from Mr. G.W. Dutcher, re: Water quality control, 4/9/70. P. 027905-027905.
- 102) Summary of coliform tests, 5/13/71. P. 027906-027906.
- 103) Memorandum to Solid Waste File, from Mr. Frederic L. Stiegler Jr., re: Vandalism and illegal dumping at landfill, 9/11/70. P. 027907-027908.
- 104) Memorandum from Mr. William Poole, re: Land Redevelopment Company contract, 11/17/70. P. 027909-027913.

- 105) Tybouts Corner Landfill D.G.S. well records, (undated). P. 027914-027930. Well readings, well records and site maps are attached.
- 106) Letter to Mr. Uldis Karins, from Mr. Gerald P. Rasmussen, University of Delaware, re: Water quality parameters measured 1/70 through 11/70, 12/29/70. P. 027931-027940. A set of graphs is attached.
- 107) Letter to Mr. William Poole, Esquire, Potter, Anderson, and Corroon [sic], from Mr. Herbert W. Rowland, re:
  Land Redevelopment Company contract, 1/24/71.
  P. 027941-027945. An outline is attached.
- 108) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. Uldis Karins, Department of Public Works, re: Billing information, 1/29/71.
  P. 027946-027946.
- 109) Letter to Mr. Uldis Karins, Department of Public Works, from Mr. William C. Ward, Land Redevelopment Company, re: Blowing paper incident, 2/2/71.
  P. 027947-027948.
- 110) Letter to Mr. Uldis Karins, from Mr. Thomas White, Department of Public Works, re: Limited dumping area, 3/8/71. P. 027949-027949.
- 111) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. Uldis Karins, Department of Public Works, re: Deficiencies in operation of the landfill, 3/11/71. P. 027950-027951.
- 112) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. Uldis Karins, Department of Public Works, re: Contract for Tybouts landfill operations, 3/18/71. P. 027952-027952.
- 113) Letter to Mr. William Poole, Potter, Anderson and Corroon [sic], from Mr. William J. Conner, New Castle County, re: Landfill Redevelopment, 3/19/71.
  P. 027953-027954.
- 114) Letter to Mr. William J. Conner, from Mr. William Poole, re: Land Redevelopment Company, 3/22/71. P. 027955-027956.

- 115) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. Uldis Karins, Department of Public Works, re: Excavations at Tybouts Landfill, 4/27/71. P. 027957-027957.
- 116) Memorandum to Solid Waste File, from Mr. Frederic L. Stiegler, Jr., re: Visit to Tybouts Corner Sanitary Landfill, 4/30/71. P. 027958-027959.
- 117) Letter to Mr. George W. Dutcher, Department of Public Works, from Mr. Donald K. Harmeson, DE State Board of Health, re: General property plan for the Tybouts Sanitary Landfill, 5/4/71. P. 027960-027961.
- 118) Letter to Mr. Uldis Karins, from Mr. Gerald P. Rasmussen, University of Delaware, re: Water quality parameters, 5/14/71. P. 027962-027963.
- 119) Memorandum of meeting with county executive, from Mr. William Poole, re: Land Redevelopment Company, 5/25/71. P. 027964-027965.
- 120) Memorandum of meeting of Ward, Roland, and Poole with Conner, Taylor and Karins, from Mr. William Poole, re: Land Redevelopment Company, 5/25/71.
  P. 027966-027966.
- 121) Report: <u>Hydrologic Study of Sanitary Landfill for New Castle County, Delaware</u>, prepared by Mr. James P. Chao, 5/71. P. 027967-027988.
- 122) Location of test borings, DuPont plant, 12/5/69. P. 027989-027990.
- 123) Monthly balance sheet, 6/71. P. 027991-027991.
- 124) Monthly balance sheet, 5/71. P. 027992-027992.
- 125) Monthly balance sheet, 4/71. P. 027993-027993.
- 126) Monthly balance sheet, 3/71. P. 027994-027994.
- 127) Monthly balance sheet, 2/71. P. 027995-027995.
- 128) Monthly balance sheet, 1/71. P. 027996-027996.
- 129) Land Redevelopment Company, schedule of load counts for trucks not paid for by county, (undated).

- P. 027997-027997.
- 130) Land Redevelopment Company, calculation of money due for loads not paid for by New Castle County, (undated). P. 027998-027998.
- 131) Pond samples, (undated). P. 027999-027999.
- 132) Estimates of capacity of landfill, (undated). P. 028000-028000.
- 133) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. Uldis Karins, re: Depositing refuse in the middle pit, 6/15/71. P. 028001-028001.
- 134) Amendment to lease agreement dated 12/16/68, 6/16/71. P. 028002-028004.
- 135) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. Uldis Karins, re: Retention of well points, 6/24/71. P. 028005-028005.
- 136) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. Uldis Karins, re: Termination of landfill operations, 7/8/71. P. 028006-028006.
- 137) Letter to Mr. Uldis Karins, Department of Public Works, from Mr. Shankha K. Banerji, Matz, Childs and Associates, re: Leachate problems, 7/15/71.
  P. 028007-028008.

# XLVIII. TYBOUTS HYDROLOGY RICHARDSON ASSOCIATES BACKGROUND DOCUMENTS 1968 TO 1979

- 1) Letter to Mr. Frank Landa, Woodlawn Gravel Company, from Mr. Logan N. Miller, Edward H. Richardson Associates, Inc., re: Analyses of fresh water pond, 11/30/71. P. 028009-028025. A laboratory report is attached.
- 2) Letter to Mr. M.A. Apgar, Department of Natural Resources and Environmental Control, from Mr. Glenn K. Elliott, Edward H. Richardson Associates, Inc., re: Transmittal of requested copies of the driller's logs and a location plan for the borings performed at the Tybouts Corner Landfill, 10/10/74. P. 028026-028051. Copies of the logs are attached.
- 3) Letter to Mr. N.C. Vasuki, Delaware Division of Environmental Control, from Mr. Albert W. Madora, New Castle County Department of Public Works, re: Transmittal of Interim Report No. 2 on ground water monitoring at Tybouts Corner Landfill by Edward A. Richardson Associates, Inc., 10/30/75. P. 028052-028064. A letter and Interim Report No. 2 are attached.
- 4) Letter to Mr. N.C. Vasuki, Delaware Division of Environmental Control, from Mr. Albert W. Madora, New Castle County Department of Public Works, re: Transmittal of Interim Report No. 3 on groundwater level monitoring, 11/13/75. P. 028065-028068. A letter and a copy of Interim Report No. 3 are attached.
- 5) Letter to Mr. N.C. Vasuki, Delaware Division of Environmental Control, from Mr. Albert W. Madora, New Castle County Department of Public Works, re: Transmittal of Interim Report No. 4 on groundwater level monitoring program, 12/22/75. P. 028069-028072. A letter and Interim Report No. 4 are attached.
- 6) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn Elliott, Edward H. Richardson Associates, Inc., re: Interim Report No. 5 Groundwater Monitoring, 1/26/76.
  P. 028073-028076. The Interim Report is attached.

- 7) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn K. Elliott, Edward H. Richardson Associates, Inc., re: Interim Report No. 6 Groundwater and Surface Water Monitoring, 4/15/76. P. 028077-028097. The Interim Report is attached.
- 8) Letter to Mr. Albert Madora, New Castle County
  Department of Public Works, from Mr. N.C. Vasuki,
  Delaware Division of Environmental Control, re:
  Directive to county to provide potable water for two
  area residences, 5/14/76. P. 028098-028100.
  Residential analytical well data and a topographic map
  are attached.
- 9) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn K. Elliott, Edward H. Richardson Associates, Inc., re: Transmittal of Interim Report No. 7 Groundwater Monitoring Report, 6/8/76. P. 028101-028103. A summary of the data is attached.
- 10) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn K. Elliott, Edward H. Richardson Associates, Inc., re: Transmittal of Interim Report No. 8 Groundwater Monitoring Report, 7/23/76. P. 028104-028106. A summary of the data is attached.
- 11) Letter to Mr. Joseph J. Farnan, Jr., New Castle County Attorney, from Ms. Catherine S. Mulholland, Assistant County Attorney, re: County's potential liability on Tybout's Landfill, 6/5/78. P. 028107-028109. A reference letter is attached.
- 12) Letter to Mrs. Sara Wagner from Mr. Joseph J. Farnan, Jr., County Attorney, re: County's response to Mrs. Sarah Wagner's water problems, 3/16/77.
  P. 028110-028110.
- 13) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn K. Elliott, Edward H. Richardson Associates, Inc., re: Summary Report Groundwater Monitoring Program representing completion of the program, 9/29/76.
  P. 028111-028129. Groundwater elevation tables and water quality tables are attached.

- 14) Letter to Mr. Uldis Karins, from Mr. Robert D. Varrin, University of Delaware, re: Transmittal of data through 3/14/69 obtained through monitoring program, 4/29/69. P. 028130-028130.
- 15) University of Delaware Testing Program, (undated). P. 028131-028131.
- 16) Letter to Mr. Uldis Karins, New Castle County, from Mr. S.K. Banerji, University of Delaware, re: Well data and water quality changes, 3/16/70. P. 028132-028132.
- 17) Letter to Mr. Uldis Karins, New Castle County, from Mr. Shankha K. Banerji, University of Delaware, re: Groundwater quality data, 3/31/70. P. 028133-028134.
- 18) Memorandum to Mr. Robert J. Touhey, from Mr. Ramesh C. Dwivedy, re: Woodlawn Gravel NPDES permit status, 10/1/76. P. 028135-028140. A site map, two sampling stations' graphed data and a memo are attached.
- 19) Letter to Mr. Ramesh C. Dwivedy, Department of Natural Resources and Environmental Control, from Mr. William Poole, re: Comments on draft permit and public notice, 11/23/76. P. 028141-028143.
- 20) Memorandum to Mr. Joseph J. Farnan, from Ms. Catherine S. Mulholland, re: County's potential liability on Tybout's Landfill, 6/5/78. P. 028144-028144.
- 21) Meeting agenda for Representative Jack Kirby, (undated). P. 028145-028145.
- 22) Letter to Mr. Uldis Karins, New Castle County, from Mr. Robert R. Westerman, DE State Board of Health, re: Proposed contract concerning evaluation of water quality changes, 1/23/69. P. 028146-028147.
- 23) Letter to Mr. Uldis Karins, New Castle County, from Mr. S.K. Banerji, University of Delaware, re: Records of water quality investigations, quality of surface streams and ground water well analysis from 3/14/69 to 5/2/69, 6/16/69. P. 028148-028148.
- 24) Land Redevelopment Company handwritten list of correspondence, (undated). P. 028149-028151.

- 25) Memorandum to file, from Mr. William Poole, re: Woodlawn Gravel and Land Redevelopment Company, 2/12/74. P. 028152-028152.
- 26) Letter to Mr. Albert W. Madora, Department of Public Works, from Mr. Frank Moorshead, Delaware Department of Natural Resources and Environmental Control, re: Conditions for constructing observation and test wells, 3/8/74. P. 028153-028154.
- 27) Proposed intensive sampling of Red Lion/Pigeon Run with site map and notes, 9/75. P. 028155-028157. Two site maps are attached.

# XLIX. <u>CORRESPONDENCE: EPA/COUNTY/STATE BACKGROUND DOCUMENTS</u> 1968-1979

- 1) Letter to Mr. Thomas Voltaggio, U.S. EPA, from Mr. Kenneth R. Weiss, Delaware Department of Natural Resources and Environmental Control, re: Data for Tybouts Corner Landfill, 6/20/80. P. 028158-028158.
- 2) Memorandum to solid waste file, re: New Castle County proposed landfill, 11/11/68. P. 028159-028159.
- 3) Memorandum to solid waste file, re: Solid waste systems, New Castle County, Tybouts Landfill, (undated). P. 028160-028160.
- 4) Conversation notes, re: Gate truck, (undated). P. 028161-028161.
- 5) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. G.W. Dutcher, Department of Public Works, re: Formal notification of violation of the contract, 1/22/70. P. 028162-028162.
- 6) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. Uldis Karins, re: Billing of cleanup work by county, 1/29/71. P. 028163-028163.
- 7) Letter to Mr. James Wilburn, Water and Air Resources Commission, from Mr. George W. Dutcher, Department of Public Works, re: Plans for Tybout's Landfill, 11/14/68. P. 028164-028164.
- 8) Letter to State Board of Health, from Mr. Richard B. Weldon, Red Lion Community Association, re: Unsanitary conditions existing at county landfill, 2/5/69. P. 028165-028165.
- 9) Letter to State Board of Health, from Mr. Richard Weldon, Red Lion Community Association, re: Board of Health meeting, 12/12/68. P. 028166-028166.
- 10) Plan of Operations New Castle County Sanitary Landfill, 11/21/83. P. 028167-028169.

### L. <u>INDUSTRIAL</u> / HAZARDOUS WASTES

- 1) Letter to Mr. Robert Westerman, State Board of Health, from Mr. G.W. Dutcher, Department of Public Works, re: Request for detailed interpretation of item 10, page 11 of the state sanitary code, 1/20/69. P. 028170-028170.
- 2) Letter to Mr. G.W. Dutcher, Department of Public Works, from Mr. Robert Westerman, DE State Board of Health, re: Response to letter of January 20, 1969. 1/23/69. P. 028171-028172.
- 3) Letter to Mr. William Poole, Esquire, Potter, Anderson and Corroon, from Mr. Herbert W. Roland, re: Land Development Company, 1/24/71. P. 028173-028177. An outline is attached.
- 4) Letter to Mr. Uldis Karins, Department of Public Works, from Mr. William C. Ward, Land Redevelopment Company, re: Blowing paper leaving landfill, refusal to accept related costs, 2/2/71. P. 028178-028179.

## LI. WATER TABLE: RED LION CREEK

- 1) Memorandum for the record, re: Proposed solid waste disposal sites for New Castle County, (undated). P. 028180-028180.
- 2) Memorandum to Mr. Robert J. Touhey, from Mr. Ramesh C. Dwivedy, re: Woodlawn Gravel NPDES permit status, 10/1/76. P. 028181-028184. A site map and a sampling station's graphed data are attached.
- Journal article, "We Can't Afford to Let This Happen Again", by Mr. Michael Apgar, (undated). P. 028185-028187.

#### LII. WOODLAWN NPDES PERMIT

- 1) Letter to Mr. N.C. Vasuki, Delaware Division of Environmental Control, from Mr. William Poole, Potter, Anderson and Corroon, re: Woodlawn Gravel Company, 8/31/76. P. 028188-028188.
- 2) Routing slips to Mr. Ramesh C. Dwivedy, re: Survey results, 9/28/76. P. 028189-028189.
- 3) Handwritten memorandum, re: Woodlawn Gravel Company NPDES permit, 12/21/76. P. 028190-028190.
- 4) Woodlawn Gravel Company NPDES permit information, (undated). P. 028191-028191.
- 5) Letter to Mr. Frank Landa, Woodlawn Gravel Company, from Mr. Robert J. Touhey, re: Comments on the "Preliminary Engineering Report for Woodlawn Gravel Company" dated 1/19/77, 2/16/77. P. 028192-028193.
- 6) Letter to Mr. Robert J. Touhey, Department of Natural Resources and Environmental Control, from Mr. Frank Landa, Woodlawn Gravel Company, re: Comments on "Preliminary Engineering Report for Woodlawn Gravel Company", 2/25/77. P. 028194-028195.
- 7) Letter to Mrs. Sara Wagner, from Mr. Joseph J. Farnan, Jr., re: County's response to Mrs. Wagner's water problem, 3/16/77. P. 028196-028196.
- 8) Letter to Mr. Robert J. Touhey, Department of Natural Resources and Environmental Control, from Mr. Paul E. Ambrose, re: Application for Woodlawn Gravel found to be administratively complete, 5/4/77. P. 028197-028197.

### LIII. DOMESTIC WELLS BACKGROUND DOCUMENTS 1968 TO 1979

- 1) Letter to Mr. Uldis Karins, from Mr. Shankha K. Banerji, University of Delaware, re: Bacterial quality of house water supplies, 1/16/70.
  P. 028198-028198.
- 2) Letter to Mr. Donald K. Harmeson, State Board of Health, from Mr. G.W. Dutcher, Department of Public Works, re: University of Delaware report pertaining to coliform counts in water wells, 1/29/70. P. 028199-028199.
- 3) Letter to Mr. Uldis Karins, from Mr. Shankha K. Banerji, University of Delaware, re: Groundwater quality data to 2/27/70, 3/31/70. P. 028200-028201.
- 4) Letter to Mr. Donald K. Harmeson, State Board of Health, from Mr. G.W. Dutcher, re: Bacterial contamination at McCaffery house, 4/9/70. P. 028202-028202.
- 5) Summary of coliform tests, 5/13/71. P. 028203-028203.

# LIV. TYBOUTS CHRONOLOGICAL FILE VOLUME II AUGUST 6, 1971 TO 1980, BACKGROUND DOCUMENTS

- 1) Letter to Dr. Shankha Banerji, Matz, Childs and Associates, from Mr. Larry L. Olson, University of Delaware, re: Data on ponds at landfill, 8/6/71. P. 028204-028204.
- 2) Letter to Mr. Frank Landa, from Mr. Larry Olson, re: Analysis of sand samples, 8/7/71. P. 028205-028210. The analysis is attached.
- 3) Letter to Mr. Eugene Chasson, Jr., University of Delaware, from Mr. Uldis Karins, re: Water quality investigation, 8/13/71. P. 028211-028211.
- 4) Letter to Mr. Uldis Karins, New Castle County
  Department of Public Works, from Mr. Gerald P.
  Rasmussen, University of Delaware, re: Summary of
  results of ground and surface water quality
  measurements, 9/7/71. P. 028212-028233. The summary
  data are attached.
- 5) Letter to Mr. W.J. Conner, from Mr. G.W. Dutcher, Department of Public Works, re: Report on county expenditures chargeable to Land Redevelopment, 9/24/71. P. 028234-028235.
- 6) Letter to Mr. Uldis Karins, Department of Public Works, from Mr. Larry L. Olson, University of Delaware, re: Odor problem at landfill, 11/4/71. P. 028236-028237.
- 7) Memorandum to Mr. Bill Uffelman, from Mr. G.W. Dutcher, Department of Public Works, re: Monthly summary data, 11/9/71. P. 028238-028238.
- 8) Letter to Mr. William C. Ward, Land Redevelopment Company, from Mr. Uldis Karins, Department of Public Works, re: Wash ponds, 11/16/71. P. 028239-028239.
- 9) Letter to Mr. Frank Landa, Woodlawn Gravel Company, from Mr. Logan N. Miller, Edward H. Richardson Associates, Inc., re: Analysis of the fresh water pond, 11/30/71. P. 028240-028243. The analysis is attached.

- 10) Letter to Mr. William H. Uffelman, from Mr. William Poole, re: Land Redevelopment arbitration, 12/2/71. P. 028244-028245.
- 11) Memorandum to Mr. William H. Uffelman, Jr., from Mr. William J. Conner, New Castle County, re: Land Redevelopment Company contract, 12/2/71. P. 028246-028248.
- 12) Letter to Mr. William Poole, Potter, Anderson and Corroon, from Mr. William H. Uffelman, New Castle County, re: Land Redevelopment arbitration, 12/3/71. P. 028249-028250.
- 13) Letter to Mr. William Poole, from Mr. William H. Uffelman, New Castle County, re: Leaching at the landfill, 12/16/71. P. 028251-028282. The financial report of the landfill operation is attached.
- 14) Land Redevelopment Company, cost to date of relocating pond #4, (undated). P. 028283-028283.
- 15) Land Redevelopment Company, cost to date of attempts to correct pond pollution, (undated). P. 028284-028284.
- 16) Land Redevelopment Company, cost of relocating scale house and roads, (undated). P. 028285-028286.
- 17) Land Redevelopment Arbitration, problem areas to be developed in detail, (undated). P. 028287-028287.
- 18) Land Redevelopment Arbitration, chronology, (undated). P. 028288-028290.
- 19) Outline of testimony of Mr. William C. Ward, (undated). P. 028291-028302.
- 20) Outline of testimony of Mr. Frank Landa, (undated). P. 028303-028307.
- 21) Letter to Mr Eugene R. Perry and Mr. John V. Ingham, from Mr. William Poole, Potter, Anderson and Corroon, re: Land Redevelopment Company's reply to affirmative statements of county attorney, 1/12/72. P. 028308-028309.

- 22) Letter to Mr. William H. Uffelman, from Mr. William Poole, Potter, Anderson and Corroon, re: Land redevelopment, 2/3/72. P. 028310-028311.
- 23) Letter to Mr. William Poole, Potter, Anderson and Corroon, from Mr. William H. Uffelman, New Castle County, re: Land Redevelopment Company, 2/4/72. P. 028312-028313.
- 24) Letter to Mr. John V. Ingham and Mr. Eugene R. Perry, from Mr. William Poole, Potter, Anderson and Corroon, re: Land Redevelopment Company, 2/23/72. P. 028314-028318.
- 25) Letter to Mr. William Poole, Potter, Anderson and Corroon, and Mr. William H. Uffelman, New Castle County, from Mr. John V. Ingham and Mr. Eugene R. Perry, re: Arbitration between New Castle County and Land Redevelopment Company, 3/1/72. P. 028319-028323. The finding and release are attached.
- 26) Letter to Mr. William Poole, Potter, Anderson and Corroon, from Mr. William J. Conner, New Castle County, re: Completion of arbitration proceedings, 3/13/72. P. 028324-028324.
- 27) Letter to Mr. William J. Conner, from Mrs. Margaret Gunning, re: Settlement of the Land Redevelopment arbitration, 3/16/72. P. 028325-028325.
- 28) Memorandum to File, from Mr. William Poole, re: Woodlawn Gravel and Land Redevelopment Company, 2/12/74. P. 028326-028326.
- 29) Letter to Mr. Albert W. Madora, Department of Public Works, from Mr. Frank Moorshead, Delaware Department of Natural Resources and Environmental Control, re: Construction of observation and test wells, 3/8/74. P. 028327-028328.
- 30) Report: <u>Groundwater Monitoring at Tybouts Corner Landfill</u>, prepared by E. H. Richardson Associates, 3/26/74. P. 028329-028341.
- 31) Memorandum to Mr. W.S. O'Sullivan, from Mr. David C. Clark, New Castle County, re: Progress report on Tybouts Corner Landfill monitoring program, Part II, 3/26/74. P. 028342-028343.

- 32) Letter to Mr. Lee J. Beetschen, Delaware Department of Natural Resources and Environmental Control, from Mr. William Poole, Potter, Anderson and Corroon, re: Woodlawn Gravel Company, 6/12/74. P. 028344-028345.
- 33) Letter to Mr. M.A. Apgar, Delaware Department of Natural Resources and Environmental Control, from Mr. Glenn K. Elliot, Edward H. Richardson Associates, Inc., re: Driller's logs and location plan for borings, 10/10/74. P. 028346-028371. Twenty-five boring logs are attached.
- 34) Memorandum to Mr. Warren S. O'Sullivan, from Mr. David C. Clark, re: Comments on subsurface investigation, 1/2/75. P. 028372-028373.
- 35) Site map, proposed intensive sampling of Red Lion/ Pigeon Run, (undated). P. 028374-028374.
- 36) Local climatological data tables, (undated). P. 028375-028376.
- 37) Letter to Mr. N.C. Vasuki, State of Delaware Division of Environmental Control, from Mr. Albert W. Madora, New Castle County Department of Public Works, re: Interim Report No. 2 on groundwater monitoring, 10/30/75. P. 028377-027389. A letter and the report are attached.
- 38) Letter to Mr. N.C. Vasuki, State of Delaware Division of Environmental Control, from Mr. Albert W. Madora, New Castle County Department of Public Works, re: Interim Report No. 3 on groundwater monitoring, 11/13/75. P. 028390-028393. A letter and the sampling data are attached.
- 39) Handwritten notes, Tybouts Corner Landfill, 12/29/75. P. 028394-028394.
- 40) Letter to Mr. N.C. Vasuki, State of Delaware Division of Environmental Control, from Mr. Albert W. Madora, New Castle County Department of Public Works, re: Interim Report No. 4 on groundwater monitoring, 12/22/75. P. 028395-028398. A letter and the groundwater sampling data are attached.
- 41) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn K. Elliott, Edward H.

- Richardson Associates, Inc., re: Interim Report No. 5 on groundwater monitoring, 1/26/76. P. 028399-028402. The groundwater sampling data is attached.
- 42) Memorandum to Mr. Stephen Kowalchuk, Jr., from Mr. David C. Clark, re: Request for additional sampling, 2/27/76. P. 028403-028403.
- 43) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn K. Elliott, Edward H. Richardson Associates, Inc., re: Interim Report No. 6 on groundwater and surface water monitoring, 4/15/76. P. 028404-028422. The report is attached.
- 44) Letter to Mr. Albert Madora, New Castle County
  Department of Public Works, from Mr. N.C. Vasuki, State
  of Delaware Division of Environmental Control, re:
  Sampling data from well belonging to Ms. Sara Wagner,
  5/14/76. P. 028423-028426. The sampling data and a
  map are attached.
- 45) Handwritten note from Mr. Warren S. O'Sullivan, 5/20/76. P. 028427-028427.
- 46) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn K. Elliott, Edward H. Richardson Associates, Inc., re: Interim Report No. 7 on groundwater monitoring, 6/8/76. P. 028428-028430. The sampling data is attached.
- 47) Telephone message slip from Ms. Sara Wagner, re: Bad well, 6/11/76. P. 028431-028431.
- 48) Letter to Mrs. Sara Wagner, from Mr. Albert W. Madora, New Castle County Department of Public Works, re: Leachate problem, 6/14/76. P. 028432-028432.
- 49) Letter to Mr. William C. and Mrs. Elizabeth O. Ward, from Mr. N.C. Vasuki, State of Delaware Division of Environmental Control, re: Liability for contaminated well belonging to Ms. Sara Wagner, 6/30/76. P. 028433-028435. A copy of the envelope is attached.
- 50) Letter to Mr. N.C. Vasuki, State of Delaware Division of Environmental Control, from Mr. William Poole, Potter, Anderson and Corroon, re: Liability for Tybout's Corner Landfill, 7/21/76. P. 028436-028437.

- 51) Letter to Mr. Thomas Luce, Esquire, New Castle County Legal Office, from Ms. June D. MacArtor, State of Delaware Division of Environmental Control, re: Leachate contamination of a domestic well, 7/26/76. P. 028438-028438.
- 52) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn K. Elliott, Edward H. Richardson Associates, Inc., re: Interim Report No. 8 on groundwater monitoring, 7/23/76. P. 028439-028441. The sampling data is attached.
- 53) Handwritten notes on Tybout's Corner Landfill, (undated). P. 028442-028443.
- 54) Letter to Ms. June D. MacArtor, Esquire, Department of Natural Resources and Environmental Control, from Mr. Thomas F. Luce, New Castle County Department of Law, re: Leachate problem, 8/4/76. P. 028444-028445.
- 55) Letter to Mr. Albert W. Madora, New Castle County
  Department of Public Works, from Mr. Donald W. Booker,
  re: Attorney representing Ms. Sara Wagner, 9/2/76.
  P. 028446-028446.
- 56) Letter to Mr. Donald W. Booker, Esquire, from Mr. Thomas F. Luce, New Castle County Department of Law, re: Liability for contaminated well belonging to Ms. Sara Wagner, 9/10/76. P. 028447-028447.
- 57) Memorandum to Mr. Robert J. Touhey, from Mr. Ramesh C. Dwivedy, re: Woodlawn Gravel NPDES, 9/17/76.
  P. 028448-028453. Sampling station graphs are attached.
- 58) Memorandum to Mr. Robert J. Touhey, from Mr. Ramesh C. Dwivedy, re: Follow up to a memo dated September 17, 1976, 10/1/76. P. 028454-028455.
- 59) Letter to Mr. David Clark, New Castle County Department of Public Works, from Mr. Glenn K. Elliott, Edward H. Richardson Associates, Inc., re: Groundwater monitoring program, 9/29/76. P. 028456-028474. Summary tables are attached.
- 60) Application for NPDES permit to discharge to state waters, 10/29/76. P. 028475-028475.

- 61) Draft authorization to discharge under the National Pollutant Discharge Elimination System and the laws of the State of Delaware, (undated). P. 028476-028488.
- 62) Letter to Delaware Department of Natural Resources and Environmental Control, from Mr. Ralph C. Pisapia, U.S. Department of the Interior, Fish and Wildlife Service, re: Explanation for the unavailability of the anticipated report, 11/22/76. P. 028489-028489.
- 63) Letter to Mr. Ramesh C. Dwivedy, Department of Natural Resources and Environmental Control, from Mr. William Poole, Potter, Anderson and Corroon, re: Comments on the draft permit for Woodlawn Gravel Company, 11/23/76. P. 028490-028492.
- 64) Handwritten note, re: Woodlawn Gravel, 11/24/76. P. 028493-028493.
- 65) Letter to Mr. N.C. Vasuki, Division of Environmental Control, from Mr. William Poole, Potter, Anderson and Corroon, re: Response to a letter dated August 25, 1976, 8/31/76. P. 028494-028494.
- 66) Letter to Mr. Ramesh Dwivedy, Department of Natural Resources and Environmental Control, from Mr. Frank Landa, Woodlawn Gravel Company, re: Request for a construction permit, 12/13/76. P. 028495-028495.
- 67) Letter to Mr. William Poole, Potter, Anderson and Corroon, from Mr. Ramesh C. Dwivedy, re: Woodlawn Gravel Company draft NPDES permit, 12/13/76. P. 028496-028497.
- 68) Handwritten note, re: Woodlawn Gravel comments on letter dated November 23, 1976. P. 028498-028498.
- 69) Letter to Director, Department of Natural Resources and Environmental Control, from Mr. William G. Gordon, U.S. Department of Commerce, re: NPDES permit, 12/20/76. P. 028499-028499.
- 70) Handwritten note, re: Woodlawn Gravel, 12/21/76. P. 028500-028500.
- 71) Site description of Woodlawn Gravel Company, (undated). P. 028501-028501.

- 72) Letter to Mr. Frank Landa, Woodlawn Gravel Company, from Mr. Robert J. Touhey, re: Response to a letter dated December 13, 1976, 12/23/76. P. 028502-028502.
- 73) Letter to Mr. Frank Landa, Woodlawn Gravel Company, from Mr. Robert J. Touhey, re: Comments on the "Preliminary Engineering Report for Woodlawn Gravel Company" dated January 19, 1977, 2/16/77. P. 028503-028504.
- 74) Letter to Mr. Robert J. Touhey, Department of Natural Resources and Environmental Control, from Mr. Frank Landa, Woodlawn Gravel Company, re: Preliminary engineering report, 2/25/77. P. 028505-020506.
- 75) Letter to Mrs. Sara Wagner, from Mr. Joseph J. Farnan, Jr., New Castle County Department of Law, re: Water problems, 3/16/77. P. 028507-028507.
- 76) Letter to Mr. Robert J. Touhey, Department of Natural Resources and Environmental Control, from Mr. Paul E. Ambrose, U.S. EPA, re: Memorandum of agreement, 5/4/77. P. 028508-028508.
- 77. Letter to Mr. Joseph J. Farnan, Jr., from Ms. Catherine S. Mulholland, New Castle County Department of Law, re: Tybouts Corner Landfill liability, 6/5/78. P. 028509-028511. A letter is attached.
- 78. Letter to Ms. Sara Wagner, from Mr. Joseph J. Farnan, Jr., New Castle County Department of Law, re: Water problems, 3/16/77. P. 028512-028512.
- 79. Memorandum to Mr. Austin P. Olney, from Mr. Robert J. Touhey, re: Tybouts Corner Landfill, 5/16/79. P. 028513-028531. The following are attached:
  - a) a letter regarding potential groundwater
     contamination;
  - b) a federal register notice;
  - c) three site maps;
  - d) tables;
  - e) a handwritten note;

f) an article.